ARTICLE 800 — COMMUNICATIONS CIRCUITS

16-347 Log #35 NEC-P16 **Final Action: Accept in Principle**
(800.1)

Note: The Technical Correlating Committee advises that article scope statements are the responsibility of the Technical Correlating Committee and the Technical Correlating Committee "Rejects" the Panel Action.
The suggested revision of the Scope covers requirements that are the jurisdiction of other Panels, such as 725.41(A)(4) and the Panel Action on Proposal 3-187 for signaling related wiring systems for computer equipment.
Submitter: Stanley Kaufman, CableSafe, Inc.
Comment on Proposal No: 16-71
Recommendation: Accept this proposal in principle as shown below:
This article covers telephone, telegraph (except radio), outside wiring for fire alarm and burglar alarm, and similar central station systems; and telephone systems not connected to a central station system but using similar types of equipment, methods of installation, and maintenance. This article also covers computer networks, except: fire alarm systems, remote control systems and computers in an information technology equipment room.
FPN No. 1: For installation requirements for equipment and circuits in an information technology equipment room, see Article 645.
FPN No. 2: For further information on remote control systems, see Article 725.
FPN No. ~~1~~3: For further information for fire alarm, guard tour, sprinkler waterflow, and sprinkler supervisory systems, see Article 760.
FPN No. ~~2~~4: For installation requirements of optical fiber cables, see Article 770.
FPN No. ~~3~~ 5: For installation requirements for network-powered broadband communications circuits, see Article 830.
Substantiation: This suggested rewording is intended to include computer wiring without implying that all audio circuits are within the scope of the article. It also clarifies that fire alarm system computers are not part of this article.
Panel Meeting Action: Accept in Principle
Panel Statement: See panel action on Comment 16-349. This meets the submitter's intent.
Number Eligible to Vote: 15
Ballot Results: Affirmative: 15

16-348 Log #878 NEC-P16 **Final Action: Reject**
(800.1)

Submitter: Harold K. Siems, Florida Electric Service Co. Inc.
Comment on Proposal No: 16-28
Recommendation: Disagree with panel action. Agree with proposed text.
Substantiation: This correlates consistency and uniformity with ROP 9-15, Log #1402; ROP 9-18, Log #1404; ROP 9-23, Log #1405; ROP 9-68, Log #1406; Proposal 1-109; ROP 3-78 Log #1497 and recognizes the establsihed use of bottomless handhole enclosures.
Panel Meeting Action: Reject
Panel Statement: The comment contains incorrect references. CMP 16 is unsure of the submitter's intent. See Comment 16-383.
Number Eligible to Vote: 15
Ballot Results: Affirmative: 15

16-349 Log #1192 NEC-P16 **Final Action: Accept**
(800.1)

Note: The Technical Correlating Committee advises that article scope statements are the responsibility of the Technical Correlating Committee and the Technical Correlating Committee "Rejects" the Panel Action.
The suggested revision of the Scope covers requirements that are the jurisdiction of other Panels, such as 725.41(A)(4) and the Panel Action on Proposal 3-187 for signaling related wiring systems for computer equipment.
Submitter: James E. Brunssen, Telcordia Technologies, Inc.
Comment on Proposal No: 16-71
Recommendation: Revise the text of Proposal 16-71 as accepted by CMP 16 as follows:
"800.1 Scope. This Article covers communications circuits and equipment that provide, through a utility-user network point of demarcation, any combination of voice, audio, video, data, interactive services ~~and equipment not in an information technology equipment room,~~ telegraph (except radio), outside wiring for fire alarm and burglar alarm, and similar central station systems; and ~~telephone systems~~ communications circuits not connected to a central station system but using similar types of equipment, method of installation, and maintenance." This article also covers computer networks except: fire alarm systems, remote control systems and computers in an information technology equipment room.
FPN No. 1: For further information for fire alarm, guard tour, sprinkler waterflow, and sprinkler supervisory systems, see Article 760.
FPN No. 2: For installation requirements of optical fiber cables, see Article 770.
FPN No. 3: For installation requirements for network-powered broadband communications circuits, see Article 830.
FPN No. 4: For installation requirements for equipment and circuits in an information technology equipment room, see Article 645.
FPN No. 5: For further information on remote control systems, see Article 725.
Substantiation: The term "telephone" implies a single, limited medium for the transmission of voice that is no longer valid in today's complex world of telecommunications. "Telephone" has evolved to the point where it is a communications system transporting information in various forms including voice, data, audio, video, and interactive services, and using varied technologies including copper wire, coaxial cable, optical fiber, and radio links, as well as high frequency carrier systems and advanced data processing and switching techniques. The proposed revision is needed to convey the concept of modern-day telecommunications to the user of the NEC. The addition of the text "through a utility-user network point of demarcation" clearly identifies the scope as covering communications services and equipment provided by a communications utility, including the associated data services and networking.
Panel Meeting Action: Accept
Number Eligible to Vote: 15
Ballot Results: Affirmative: 15

16-350 Log #2163 NEC-P16 **Final Action: Accept in Principle**
(800.1)

Note: The Technical Correlating Committee advises that article scope statements are the responsibility of the Technical Correlating Committee and the Technical Correlating Committee "Rejects" the Panel Action.
The suggested revision of the Scope covers requirements that are the jurisdiction of other Panels, such as 725.41(A)(4) and the Panel Action on Proposal 3-187 for signaling related wiring systems for computer equipment.
Submitter: Robert W. Jensen, dbi-Telecommunications
Comment on Proposal No: 16-71
Recommendation: Accept this proposal in principle as shown below:
This article covers telephone, telegraph (except radio), outside wiring for fire alarm and burglar alarm, and similar central station systems; and telephone systems not connected to a central station system but using similar types of equipment, methods of installation, and maintenance. This article also covers computer networks except: fire alarm systems, remote control systems and computers in an information technology equipment room.
FPN No. 1: For installation requirements for equipment and circuits in an information technology equipment room, see Article 645.
FPN No. 2: For further information on remote control systems, see Article 725.
FPN No. 3: For further information for fire alarm, guard tour, sprinkler waterflow, and sprinkler supervisory systems, see Article 760. ——Deleted: 1
FPN No. 4: For installation requirements of optical fiber cables, see Article 770. ————————————————————————————————————Deleted: 2
FPN No. 5: For installation requirements for network-powered broadband communications circuits, see Article 830. ————————————-Deleted: 3
Substantiation: BICSI submitted this proposal because Communications and Information Technology have converged. Article 800 currently covers traditional telephony and digital telephony circuits. Article 800 also covers computer signaling when the computer signals are run in the same cable with telephone circuits. Today, when we design and install cabling systems for telephony and computers in a building, we do not know whether the cables we are installing will be used for telephones and be covered by Article 800, whether they will be used for computers and be covered by Article 725 or whether they will be used for both telephones and computers, and be covered by Article 800. We are able to work around the issue by using communications cables because they are permitted to substitute for class 2 cables. In a typical office, each desk has a telephone and a computer on it. We believe that Article 800 should cover the wiring for that telephone and that computer regardless of whether or not one cable is used (clearly under Article 800) or two separate cables are used.
We agree that the proposal accepted in principle by panel 16 was too broad. This suggested rewording is intended to exclude:
1) Computers used for fire alarm circuits because they belong in Article 760
2) Computers for building controls because they belong in Article 725, and
3) Computers in a computer room because Article 645 covers them.
Panel Meeting Action: Accept in Principle
Panel Statement: See panel action on Comment 16-349. This meets the submitter's intent.
Number Eligible to Vote: 15
Ballot Results: Affirmative: 15

16-351 Log #465 NEC-P16 **Final Action: Reject**
(800.1(A), 820-11(A), & 830-12(A))

Submitter: Kenneth L. Groves, Edwards Electric Corp.
Comment on Proposal No: 16-28
Recommendation: I Disagree with panel action. I Agree with proposed text.
Substantiation: This correlates consistency and uniformity with: Proposal 9-15, Log 1402, Proposal 9-18, Log 1404, Proposal 9-23, Log 1405, Proposal 9-55, Log 1406, Proposal 1-109, Proposal 3-78, Log 1497 and recognizes the established use of bottomless handhole enclosures.
Panel Meeting Action: Reject
Panel Statement: The comment contains incorrect references. CMP 16 is unsure of the submitter's intent. See Comment 16-383.
Number Eligible to Vote: 15
Ballot Results: Affirmative: 15

16-352 Log #472 NEC-P16 **Final Action: Reject**
(800.1(A), 820-11(A) & 830-12(A))

Submitter: James G. DiLullo, Dynaelectric Company, Florida
Comment on Proposal No: 16-28
Recommendation: I disagree with the panel action. I agree with proposed text.
Substantiation: This correlates consistency and uniformity with Proposal 9-15, Log 1402, Proposal 9-18, Log 1404, Proposal 9-23, Log 1405, Proposal 9-68, Log 1406, Proposal 1-109, Proposal 3-78, Log 1497 and recognizes the established use of bottomless handhole enclosures.
Panel Meeting Action: Reject
Panel Statement: The comment contains incorrect references. CMP 16 is unsure of the submitter's intent. See Comment 16-383.
Number Eligible to Vote: 15
Ballot Results: Affirmative: 15

16-353 Log #503 NEC-P16 **Final Action: Reject**
(800.1(A), 820-11(A) & 830-12(A))

Submitter: Vernon Jay Franke, Jr., Construction Consultants of Florida Inc.
Comment on Proposal No: 16-28
Recommendation: I disagree with the Panel Action, and agree with the proposed text.
Substantiation: This correlates consistencey, and uniformity with Proposal 9-15 (Log 1402), Proposal 9-18 (Log 1404), Proposal 9-23 (Log 1405), Proposal 9-68 (Log 1406), Proposal 1-109, Proposal 3-78 (Log 1497), and recognizes the established use of bottomless handhole enclosures.
Panel Meeting Action: Reject
Panel Statement: The comment contains incorrect references. CMP 16 is unsure of the submitter's intent. See Comment 16-383.
Number Eligible to Vote: 15
Ballot Results: Affirmative: 15

16-354 Log #710 NEC-P16 **Final Action: Reject**
(800.1(A), 820-11(A) & 830-12(A))

Submitter: Joseph DeRosa, Florida Electric Contracting Service, Inc.
Comment on Proposal No: 16-28
Recommendation: I disagree with the panel action, and agree with the proposed text.
Substantiation: This correlates consistency and uniformity with Proposal 9-15, log 1402, proposal 9-18, log 1404, proposal 9-23, log 1405, proposal 9-68, log 1406, proposal 1-109, proposal 3-78, log 1497 and recognizes the established use of bottomless handhole enclosures.
Panel Meeting Action: Reject
Panel Statement: The comment contains incorrect references. CMP 16 is unsure of the submitter's intent. See Comment 16-383.
Number Eligible to Vote: 15
Ballot Results: Affirmative: 15

16-355 Log #727 NEC-P16 **Final Action: Reject**
(800.1(A), 820-11(A) & 830-12(A))

Submitter: Pascal McFadden, Florida Electric Contracting Service, Inc.
Comment on Proposal No: 16-28
Recommendation: I disagree with the panel action. I agree with the proposed text.
Substantiation: This correlates consistency and uniformity with Proposal 9-15, log 1402, proposal 9-18, log 1404, proposal 9-23, log 1405, proposal 9-68, log 1406, proposal 1-109, proposal 3-78, log 1497 and recognizes the established use of bottomless handhole enclosures.
Panel Meeting Action: Reject
Panel Statement: The comment contains incorrect references. CMP 16 is unsure of the submitter's intent. See Comment 16-383.
Number Eligible to Vote: 15
Ballot Results: Affirmative: 15

16-356 Log #1287 NEC-P16 **Final Action: Reject**
(800.1(A), 820-11(A), 830-12(A))

Submitter: Paul Yesbeck, Acolite Claude United Sign Co.
Comment on Proposal No: 16-28
Recommendation: Disagree with panel action. Agree with proposed text.
Substantiation: This correlates consistency and uniformity with: ROP 9-15, Log 1402; ROP 9-18, Log 1404; ROP 9-23, Log 1405, ROP 9-68, Log 1406, Proposal 1-109; ROP 3-78, Log 1497 and recognizes the established use of bottomless handhole enclosures.
Panel Meeting Action: Reject
Panel Statement: The comment contains incorrect references. CMP 16 is unsure of the submitter's intent. See Comment 16-383.
Number Eligible to Vote: 15
Ballot Results: Affirmative: 15

16-357 Log #1346 NEC-P16 **Final Action: Reject**
(800.1(A), 820-11(A), 830-12(A))

Submitter: Victor Lombardi, Miami-Dade County Building Department
Comment on Proposal No: 16-28
Recommendation: Disagree with panel action. Agree with proposed text.
Substantiation: This correlates consistency and uniformity with: ROP 9-15 Log #1402, ROP 9-18 Log #1404, ROP 9-23 Log #1405, ROP 9-68 Log #1406, Proposal 1-109, ROP 3-78 Log #1497 and recognizes the established use of bottomless handhole enclosures.
Panel Meeting Action: Reject
Panel Statement: The comment contains incorrect references. CMP 16 is unsure of the submitter's intent. See Comment 16-383.
Number Eligible to Vote: 15
Ballot Results: Affirmative: 15

16-358 Log #676 NEC-P16 **Final Action: Reject**
(800.1(A), 820.11(A), 830.12(A) (New))

Submitter: Ron Morgan, Florida Electric Contracting Service Inc.
Comment on Proposal No: 16-28
Recommendation: Disagree with panel action. Agree with proposed text.
Substantiation: This correlates consistency and uniformity with ROP 9-15, Log #1402; ROP 9-18, Log #1404; ROP 9-23, Log #1405; ROP 9-68, Log #1406; Proposal 1-109; ROP 3-78 Log #1497 and recognizes the established use of bottomless handhole enclosures.
Panel Meeting Action: Reject
Panel Statement: The comment contains incorrect references. CMP 16 is unsure of the submitter's intent. See Comment 16-383.
Number Eligible to Vote: 15
Ballot Results: Affirmative: 15

16-359 Log #683 NEC-P16 **Final Action: Reject**
(800.1(A), 820.11(A), 830.12(A) (New))

Submitter: Kevin J. Nuss, Florida Electric Contracting Service Inc.
Comment on Proposal No: 16-28
Recommendation: Disagree with panel action. Agree with proposed text.
Substantiation: This correlates consistency and uniformity with ROP 9-15, Log #1402; ROP 9-18, Log #1404; ROP 9-23, Log #1405; ROP 9-68, Log #1406; Proposal 1-109; ROP 3-78 Log #1497 and recognizes the established use of bottomless handhole enclosures.
Panel Meeting Action: Reject
Panel Statement: The comment contains incorrect references. CMP 16 is unsure of the submitter's intent. See Comment 16-383.
Number Eligible to Vote: 15
Ballot Results: Affirmative: 15

16-360 Log #690 NEC-P16 **Final Action: Reject**
(800.1(A), 820.11(A), 830.12(A) (New))

Submitter: Donald J. Hicks, Florida Electric Contracting Service Inc.
Comment on Proposal No: 16-28
Recommendation: Disagree with panel action. Agree with proposed text.
Substantiation: This correlates consistency and uniformity with: ROP 9-15 Log #1402, ROP 9-18, Log #1404, ROP 9-23 Log #1405, ROP 9-68 Log #1406, Proposal 1-109, ROP 3-78 Log #1497 and recognizes the established use of bottomless handhole enclosures.
Panel Meeting Action: Reject
Panel Statement: The comment contains incorrect references. CMP 16 is unsure of the submitter's intent. See Comment 16-383.
Number Eligible to Vote: 15
Ballot Results: Affirmative: 15

16-361 Log #871 NEC-P16 **Final Action: Reject**
(800.1(A), 820.11(A), 830.12(A))

Submitter: Steven Siems, Florida Electric Service Co. Inc. / Rep. Neca South Florida
Comment on Proposal No: 16-28
Recommendation: Disagree with panel action. Agree with proposed text.
Substantiation: This correlates consistency and uniformity with: ROP 9-15 Log #1402; ROP 9-18, Log #1404; ROP 9-23 Log #1405; ROP 9-68 Log #1406, Proposal 1-109; ROP 3-78 Log #1497 and recognizes the established use of bottomless handhole enclosures.
Panel Meeting Action: Reject
Panel Statement: The comment contains incorrect references. CMP 16 is unsure of the submitter's intent. See Comment 16-383.
Number Eligible to Vote: 15
Ballot Results: Affirmative: 15

16-362 Log #3083 NEC-P16 **Final Action: Reject**
(800.1(A), 820.11(A), 830.12(A))

Submitter: Steven Gilbert, Miami Dade Building Department
Comment on Proposal No: 16-28
Recommendation: I disagree with panel action. Agree with proposed text.
Substantiation: This correlates consistency and uniformity with ROP 9-15 Log 1402, ROP 9-18 Log 1404, ROP 9-23 Log 1405, ROP 9-68 Log 1406, Proposal 1-109, ROP 3-78 Log 1497 and recognizes the established use of bottomless handhole enclosures.
Panel Meeting Action: Reject
Panel Statement: The comment contains incorrect references. CMP 16 is unsure of the submitter's intent. See Comment 16-383.
Number Eligible to Vote: 15
Ballot Results: Affirmative: 15

16-363 Log #3089 NEC-P16 **Final Action: Reject**
(800.1(A), 820.11(A), 830.12(A))

Submitter: Billy Jackson, Miami Dade County Building Department
Comment on Proposal No: 16-28
Recommendation: I disagree with panel action. Agree with proposed text.
Substantiation: This correlates consistency and uniformity with ROP 9-15 Log 1402, ROP 9-18 Log 1404, ROP 9-23 Log 1405, ROP 9-68 Log 1406, Proposal 1-109, ROP 3-78 Log 1497 and recognizes the established use of bottomless handhole enclosures.
Panel Meeting Action: Reject
Panel Statement: The comment contains incorrect references. CMP 16 is unsure of the submitter's intent. See Comment 16-383.
Number Eligible to Vote: 15
Ballot Results: Affirmative: 15

16-364 Log #3462 NEC-P16 **Final Action: Reject**
(800.1(A), 820.11(A), 830.12(A))

Submitter: Arnold M. Velazquez, Arnold & Associates Inc.
Comment on Proposal No: 16-28
Recommendation: Disagree with panel action. Agree with proposed text.
Substantiation: This correlates consistency and uniformity with: ROP 9-15 Log #1402, ROP 9-18 Log #1404, ROP 9-23 Log #1405, ROP 9-68 Log #1406, Proposal 1-109, ROP 3-78 Log #1497 and recognizes the established use of bottomless handhole enclosures.
Panel Meeting Action: Reject
Panel Statement: The comment contains incorrect references. CMP 16 is unsure of the submitter's intent. See Comment 16-383.
Number Eligible to Vote: 15
Ballot Results: Affirmative: 15

16-365 Log #2855 NEC-P16 **Final Action: Reject**
(800.1(A), 820.11(A), and 830.12(A))

Submitter: Jose Gonzalez, Miami Dade Bldg. Department
Comment on Proposal No: 16-28
Recommendation: Disagree with panel action. Agree with proposed text.
Substantiation: This correlates consistency and uniformity with ROP 9-15 Log #1402; ROP 9-18, Log #1404; ROP 9-23, Log #1405; ROP 9-68, Log #1406; Proposal 1-109, ROP 3-78, Log #1497 and recognizes the established use of bottomless handhold enclosures.
Panel Meeting Action: Reject
Panel Statement: The comment contains incorrect references. CMP 16 is unsure of the submitter's intent. See Comment 16-383.
Number Eligible to Vote: 15
Ballot Results: Affirmative: 15

16-366 Log #3635 NEC-P16 **Final Action: Reject**
(800.1(A), 820.11(A) and 830.12(A))

Submitter: Stephen Kovach, Dade County Building & Zoning Dept.
Comment on Proposal No: 16-28
Recommendation: Disagree with panel action. Agree with proposed text.
Substantiation: This correlates consistency and uniformity with: ROP 9-15(Log #1402), ROP 9-18(Log #1404), ROP 9-23(Log #1405), ROP 9-68(Log #1406), Proposal 1-109, ROP 3-78(Log #1497) and recognizes the established use of bottomless handhole enclosures.
Panel Meeting Action: Reject
Panel Statement: The comment contains incorrect references. CMP 16 is unsure of the submitter's intent. See Comment 16-383.
Number Eligible to Vote: 15
Ballot Results: Affirmative: 15

16-367 Log #36 NEC-P16 **Final Action: Reject**
(800.2)

Submitter: Stanley Kaufman, CableSafe, Inc.
Comment on Proposal No: 16-72
Recommendation: Revise the definition of cable as shown below:
Cable. A factory assembly of two or more coaxial conductors, or paired wires, having an overall covering.
Substantiation: This suggested revised definition is an alternate to using a fine print note as originally proposed.
Panel Meeting Action: Reject
Panel Statement: See CMP 16 statement on Comment 16-368.
Number Eligible to Vote: 15
Ballot Results: Affirmative: 15

16-368 Log #822 NEC-P16 **Final Action: Accept**
(800.2)

Submitter: Technical Correlating Committee on National Electrical Code®
Comment on Proposal No: 16-72
Recommendation: The Technical Correlating Committee directs the panel to reconsider the proposal because it includes a definition in a Fine Print Note. This action will be considered by the panel as a public comment.
Substantiation: This is a direction from the National Electrical Code Technical Correlating Committee in accordance with 3-4.2 and 3-4.3 of the Regulations Governing Committee Projects.
Panel Meeting Action: Accept
Panel Statement: CMP 16 accepts the direction of the TCC to review Proposal 16-72.
CMP 16 reverses its action on Proposal 16-72 because, upon further consideration, the panel finds that no change is needed to clarify the original definition.
Number Eligible to Vote: 15
Ballot Results: Affirmative: 15

16-369 Log #1358 NEC-P16 **Final Action: Reject**
(800.2)

Submitter: Barry F. O'Connell, Tyco Thermal Controls
Comment on Proposal No: 16-74
Recommendation: Communications Circuit Integrity (CI) Cable. Cable used in communicaton systems to ensure continued operation of critical circuits during a specified time under fire conditons shall be listed as circuit integrity (CI) cable or listed as part of an Electrical Circuit Protective System.
Substantiation: The definition as proposed is narrow, because it ignores the other "Electrical Circuit Protective Systems", the listed fire-resistant electrical cable systems.
"Circuit Integrity" was introduced in Article 760 in the 1999 code, and given a common sense definition that referred to a cable's capability "to ensure continued operation of critical circuits during a specified time under fire conditions". In a FPN, it references UL2196 as the required fire-test - the same benchmark that applies to Electrical Circuit Protective Systems.
The additional words suggested are consistent with the definition in the Panel Action on Proposal 3-255, as follows:
"Fire Alarm Circuit Integrity (CI) Cable. Cables suitable for use in fire alarm systems to ensure survivability of critical circuits during a specified time under fire conditions shall be listed as circuit integrity (CI) cable or listed as part of an Electrical Circuit Protective System".
Panel Meeting Action: Reject
Panel Statement: CMP 16 refers the submitter to 2.2.2 of the 2003 NEC Style Manual, "Definitions shall not contain requirements or recommendations." Requirements cannot appear in a definition.
Number Eligible to Vote: 15
Ballot Results: Affirmative: 15

16-370 Log #1915 NEC-P16 **Final Action: Reject**
(800.2)

Submitter: Frederic P. Hartwell, Hartwell Electrical Services, Inc.
Comment on Proposal No: 16-72
Recommendation: The proposal should be accepted in principle. Fold the proposed fine print note into the definition, as follows: "A factory assembly of two or more conductors, including conductors arranged as one or more pairs and as one conductor inside another (coaxial), inside an overall covering.

Substantiation: This comment responds to the TCC note. The wording avoids using the defined term (cable) within the definition.
Panel Meeting Action: Reject
Panel Statement: See CMP 16 statement on Comment 16-368.
Number Eligible to Vote: 15
Ballot Results: Affirmative: 15

16-371 Log #3827 NEC-P16 **Final Action: Accept**
(800.2)

Submitter: Marcelo M. Hirschler, GBH International / Rep. Fire Retardant Chemicals Association
Comment on Proposal No: 16-9
Recommendation: *Reject the definitions of the various types of plenum contained within this proposal.*
Substantiation: * There is no need for these definitions in the NEC. These definitions are not contained in NFPA 90A, but, more importantly, are not needed in the NEC. Acceptance of proposals using these terms exclusively by CMP 16 is not enough justification, in view of the rejection of proposals using these terms by CMP 3 in Articles 300, 725 and 760, to put the terms into the NEC.

* This comment recommends rejection of a subdivision of "other spaces used for environmental air" and rejection of granting priority to NFPA 90A on choices of wiring methods.

* The input from CMP 3 and from the NEC Technical Coordinating Committee makes it clear that the terminology used in 300.22 has served the NEC well and needs no change. It has also become clear now that the expertise needed for choosing the type of wiring systems permitted in any space should be the prerogative of the NEC, which (through its various panels and its Technical Correlating Committee) has greater expertise and a broader view than the Technical Committee on Air Conditioning (responsible for NFPA 90A). Therefore, the NEC panels should continue making their own choices regarding wiring methods.

* It has already been shown in detail by the fire hazard and fire risk analysis presented together with my original proposals (see for example the section on pages 2080-2091 of the NEC-ROP of the substantiation for my proposal 3-130) that there is no need to change the requirements, or limit the application, for wiring methods in plenums, because the fire safety record is excellent.

* The definition of "air duct" is unnecessary in Articles 770, 800 and 820, as it has been adopted as a general NEC definition by CMP 1 in Article 100.

* I understand that this comment represents a change in some of the concepts the submitter believed when the proposal was submitted, but "even old dogs can learn".
Panel Meeting Action: Accept
Panel Statement: See panel action and statement on Comment 16-79.
Number Eligible to Vote: 15
Ballot Results: Affirmative: 15
Comment on Affirmative:
OHDE: See my Affirmative Comment for Comment 16-16.

16-372 Log #38 NEC-P16 **Final Action: Accept**
(800.3(C) (New))

Submitter: Stanley Kaufman, CableSafe, Inc.
Comment on Proposal No: 16-75
Recommendation: Delete "and multipurpose cables".
Substantiation: Proposal 16-104 eliminated multipurpose cables.
Panel Meeting Action: Accept
Number Eligible to Vote: 15
Ballot Results: Affirmative: 15

16-373 Log #37 NEC-P16 **Final Action: Reject**
(800.3(E) (New))

Submitter: Stanley Kaufman, CableSafe, Inc.
Comment on Proposal No: 16-75
Recommendation: Change original panel action from Accept to Accept in Principle and modify 800.3(B) as to add a section E:

"(E) Ducts, Plenums, and Other Air-Handling Spaces. Section 300.22, where installed in ducts or plenums or other spaces used for environmental air, shall apply.

Exception: As permitted in 800.61(A)."
Substantiation: Accepting this comment will correlate 800.3 with the suggested modifications to 770.3, 820.3 and 830.3.
Panel Meeting Action: Reject
Panel Statement: Article 800 needs to refer to 300.22 for the installation of equipment and thus specifies the appropriate raceway for communications wires and cables installed in ducts, plenums, and other space used for environmental air. In Proposal 16-75, accepted by CMP 16, 800.3(D) refers to 300.22 for equipment installation. Section 800.53(A), in the 2002 Code, refers to 300.22 for the installation on listed communications wires and cables in raceway in the spaces described in 300.22. Section 800.50, in the 2002 Code, and the definition of point of entrance, permit the use of rigid metal conduit and intermediate metal conduit to extend the point of entrance of an outside plant cable into a building. Section 300.22(B) and (C) permit the use of rigid metal conduit and intermediate metal conduit in installed in ducts, plenums, and other space used for environmental air.

A reference to 300.22 in 800.3 is not needed because the appropriate references already exist in Article 800. Furthermore, a simple reference to 300.22 would cause a conflict: that 300.22 allows certain cables to be installed in 300.22(B) and 300.22(C) spaces. Allowing any cable that is not a communications cable conflicts with 800.50.
Number Eligible to Vote: 15
Ballot Results: Affirmative: 15

16-374 Log #3142 NEC-P16 **Final Action: Accept**
(800.5)

Submitter: Michael I. Callanan, IBEW
Comment on Proposal No: 16-79
Recommendation: Continue to reject.
Substantiation: We agree with both the panel action and the panel statement to reject proposal 16-79. This comment represents the official position of the International Brotherhood of Electrical Workers Codes and Standards Committee.
Panel Meeting Action: Accept
Number Eligible to Vote: 15
Ballot Results: Affirmative: 15

16-375 Log #952 NEC-P16 **Final Action: Reject**
(800.6)

Submitter: Dorothy Kellogg, American Chemistry Council
Comment on Proposal No: 16-81
Recommendation: The installation shall also conform with 300.4(D) ~~and 300.11~~.
Substantiation: The inclusion of 300.11 into 800.6 introduces overly restrictive requirements. Panel 16 added the reference to 300.11, but did not furnish any technical support that a safety issue exists justifying the additional installation requirements of 300.11.
Panel Meeting Action: Reject
Panel Statement: Section 300.11 is appropriate for all cables regardless of whether the cable is an optical fiber cable, communications cable, coaxial cable, or network-powered broadband cable.
Number Eligible to Vote: 15
Ballot Results: Affirmative: 10 Negative: 5
Explanation of Negative:
BRUNSSEN: Comment 16-375 should be accepted. The securing and support requirements of 300.11 are overly restrictive and are inappropriate for communications conductors. Section 300.11 is appropriate for power cable assemblies that are heavier and larger than communications cables. For example, a communications cable used for premises wiring is typically less than one-quarter inch in diameter, contains four separately insulated 26 AWG conductors, and operates at 48 volts DC with available power of less than 100 volt-amperes. Modification of premises communications circuits typically involves the installation of a single, or at most, a few additional communications cables. 300.11(C) does not permit cables to be used as a support. However, as a communications system evolves, communications cables are often installed over an extended period of time and lashed together in a "cable assembly". It is overly restrictive to specify that each addition of a single communications "cable" require installation of additional and separate supports. Such added requirements serve only to unnecessarily increase installation costs. The Panel has cited neither a safety hazard nor provided technical justification for the addition of the reference to 300.11. Note that the Panel acknowledges in the Panel Statement for comment 16-71 regarding the very same issue: "CMP 16 understands that the proposal as modified by the panel is not the original intent of the submitter. However, the panel sustains its action."

DORNA: I agree and support Mr. Brunssen's explanation on this comment.

HUGHES: This comment should have been accepted. Imposing the requiremnts of NEC 300.11 for this application will result in unnecessary supports being required by the Code. 300.11 is intended to apply to power wiring and not the cabling covered in the scope of this Article. JOHNSON: I agree with the submitter's substantiation in this comment. Compliance with Section 300.11 is overly restrictive for applications of communications cable installations. 300.11 is appropriate for power assemblies which are larger and heavier than communications cables. Communications cables are smaller in diameter and lighter weight. There is no justification to disallow supporting an additional communications cable by lashing it to an existing bundle of properly supported cables. Additional communications cables will not cause undue strain on the existing cable support system.

JONES: Not any evidence or technical support was provided showing that a need or a safety issue exist justifying the reference to the additional installation requirements of 300.11. The panel has acknowledged that this additional requirement was not the intent of the submitter of the original proposal. No attempt was made by the panel to create a panel proposal that would flag this insertion during the comment stage.

Comment on Affirmative:

OHDE: See my Affirmative Comment for Comment 16-70.

16-376 Log #3133 NEC-P16 **Final Action: Accept**
(800.6)

Submitter: Michael I. Callanan, IBEW
Comment on Proposal No: 16-81
Recommendation: This proposal should be continued to be accepted in principle.
Substantiation: We agree with both the panel action and the panel statement. 300-11 is appropriate for all cables regardless if the cable is a communication cable assembly or power cable assembly. The addition of the FPN is appropriate and a good reference for installing cables. This comment represents the official position of the International Brotherhood of Electrical Workers Codes and Standards Committee.
Panel Meeting Action: Accept
Number Eligible to Vote: 15
Ballot Results: Affirmative: 10 Negative: 5
Explanation of Negative:

BRUNSSEN: Comment 16-376 should be rejected, as well as the addition of the reference to 300.11 added by the Panel in Proposal 16-81. The securing and support requirements of 300.11 are overly restrictive and are inappropriate for communications conductors. Section 300.11 is appropriate for power cable assemblies that are heavier and larger than communications cables. For example, a communications cable used for premises wiring is typically less than one-quarter inch in diameter, contains four separately insulated 26 AWG conductors, and operates at 48 volts DC with available power of less than 100 volt-amperes. Modification of premises communications circuits typically involves the installation of a single, or at most, a few additional communications cables. 300.11(C) does not permit cables to be used as a support. However, as a communications system evolves, communications cables are often installed over an extended period of time and lashed together in a "cable assembly". It is overly restrictive to specify that each addition of a single communications "cable" require installation of additional and separate supports. Such added requirements serve only to unnecessarily increase installation costs. The Panel has cited neither a safety hazard nor provided technical justification for the addition of the reference to 300.11. Note that the Panel acknowledges in the Panel Statement for comment 16-71 regarding the very same issue: "CMP 16 understands that the proposal as modified by the panel is not the original intent of the submitter. However, the panel sustains its action."

DORNA: I agree and support Mr. Brunssen's explanation on this comment.

HUGHES: This comment should have been accepted. Imposing the requiremnts of NEC 300.11 for this application will result in unnecessary supports being required by the Code. 300.11 is intended to apply to power wiring and not the cabling covered in the scope of this Article.

JOHNSON: Compliance with Section 300.11 is overly restrictive for applications of communications cable installations. 300.11 is appropriate for power assemblies which are larger and heavier than communications cables. Communications cables are smaller in diameter and lighter weight. There is no justification to disallow supporting an additional communications cable by lashing it to an existing bundle of properly supported cables. Additional communications cables will not cause undue strain on the existing cable support system.

JONES: See my explanation of negative vote on Comment 16-375.

Comment on Affirmative:

OHDE: See my Affirmative Comment for Comment 16-70.

16-377 Log #271 NEC-P16 **Final Action: Reject**
(800.8)

Submitter: Technical Committee on Air Conditioning
Comment on Proposal No: 16-83
Recommendation: Continue to accept this proposal in principle in part.
Substantiation: The Technical Committee on Air Conditioning agrees with the panel statement.

This comment is one in a series of comments including 16-12, 16-40, 16-60, 16-83, 16-115, 16-132, 16-138, 16-156, 16-180, 16-188, 16-195, 16-207, 16-209, 16-211, 16-228, 16-229, and 16-234.

Panel Meeting Action: Reject
Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:

"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."

This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.
Number Eligible to Vote: 15
Ballot Results: Affirmative: 13 Abstain: 2
Comment on Affirmative:

OHDE: See my Affirmative Comment for Comment 16-34.

Explanation of Abstention:

DORNA: See my Explanation of Abstention for Comment 16-34.

KAHN: See my Explanation of Abstention on Comment 16-34.

16-378 Log #1743 NEC-P16 **Final Action: Accept**
(800.8)

Submitter: Michael I. Callanan, IBEW
Comment on Proposal No: 16-83
Recommendation: Continue to reject.
Substantiation: I agree with the panel action to reject proposal 16-83. No technical substantiation has been provided that a change to the 2002 NEC language is needed or required. This comment represents the official position of the International Brotherhood of Electrical Workers Code and Standards Committee.
Panel Meeting Action: Accept
Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:

"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."

This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.
Number Eligible to Vote: 15
Ballot Results: Affirmative: 13 Abstain: 2
Comment on Affirmative:

OHDE: See my Affirmative Comment for Comment 16-34.

Explanation of Abstention:

DORNA: See my Explanation of Abstention for Comment 16-34.

KAHN: See my Explanation of Abstention on Comment 16-34.

16-379 Log #1787 NEC-P16 **Final Action: Reject**
(800.8)

Submitter: Richard P. Owen, City of St. Paul, Minnesota
Comment on Proposal No: 16-83
Recommendation: Continue to Accept in Part.
Substantiation: The Panel 3/Panel 16 Correlation Task Group, appointed by the NEC TCC, developed this comment.

The task group agrees with Panel 16's action and substantiation.

The following members of Panels 3 and 16 participated in this Task Group assignment: From Panel 3, Mr. Sanford E. Egesdal representing the Automatic Fire Alarm Association, Inc., Mr. Ronald E. Maassen representing the National Electrical Contractors Association, and Mr. Mark C. Ode representing Underwriters Laboratories Inc. From Panel 16, Mr. Robert W. Jensen representing the Building Industry Consulting Services International, Mr. Harold C. Ohde representing the International Brotherhood of Electrical Workers, and Mr. Joseph W. Rao representing the Independent Electrical Contractors, Inc. Mr. Richard P. Owen, the Chairman of CMP 3, representing the International Association of Electrical Inspectors, was the chairman of the Task Group.

Panel Meeting Action: Reject

Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:

"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."

This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.

Number Eligible to Vote: 15
Ballot Results: Affirmative: 13 Abstain: 2
Comment on Affirmative:
OHDE: See my Affirmative Comment for Comment 16-34.
Explanation of Abstention:
DORNA: See my Explanation of Abstention for Comment 16-34.
KAHN: See my Explanation of Abstention on Comment 16-34.

16-380 Log #2165 NEC-P16 **Final Action: Accept in Principle in Part**
(800.8)

Submitter: Robert W. Jensen, dbi-Telecommunications
Comment on Proposal No: 16-81
Recommendation: Continue to accept this proposal in principle.
Delete "and 300.11" from the last sentence.
Substantiation: Reference to section 300.11 is inappropriate for communications cables. These cables do not have to be "securely fastened in place" in order to have a safe installation
Panel Meeting Action: Accept in Principle in Part
CMP 16 accepts that part of the comment that is to accept the proposal in principle.
CMP 16 rejects the deletion of "and 300.11".
Panel Statement: Section 300.11 is appropriate for all cables regardless of whether the cable is an optical fiber cable, communications cable, coaxial cable, or network-powered broadband cable.
Number Eligible to Vote: 15
Ballot Results: Affirmative: 11 Negative: 4
Explanation of Negative:
BRUNSSEN: Comment 16-380 should be accepted. The securing and support requirements of 300.11 are overly restrictive and are inappropriate for communications conductors. Section 300.11 is appropriate for power cable assemblies that are heavier and larger than communications cables. For example, a communications cable used for premises wiring is typically less than one-quarter inch in diameter, contains four separately insulated 26 AWG conductors, and operates at 48 volts DC with available power of less than 100 volt-amperes. Modification of premises communications circuits typically involves the installation of a single, or at most, a few additional communications cables. 300.11(C) does not permit cables to be used as a support. However, as a communications system evolves, communications cables are often installed over an extended period of time and lashed together in a "cable assembly". It is overly restrictive to specify that each addition of a single communications "cable" require installation of additional and separate supports. Such added requirements serve only to unnecessarily increase installation costs. The Panel has cited neither a safety hazard nor provided technical justification for the addition of the reference to 300.11. Note that the Panel acknowledges in the Panel Statement for comment 16-71 regarding the very same issue: "CMP 16 understands that the proposal as modified by the panel is not the original intent of the submitter. However, the panel sustains its action."
DORNA: I agree and support Mr. Brunssen's explanation on this comment.
HUGHES: This comment should have been accepted. Imposing the requiremnts of NEC 300.11 for this application will result in unnecessary supports being required by the Code. 300.11 is intended to apply to power wiring and not the cabling covered in the scope of this Article.
JONES: See my explanation of negative vote on Comment 16-375.
Comment on Affirmative:
OHDE: See my Affirmative Comment for Comment 16-70.

16-381 Log #2720 NEC-P16 **Final Action: Reject**
(800.8)

Submitter: Richard Fransen, Daikin America, Inc. / Rep. Cable Fire Research Association
Comment on Proposal No: 16-83
Recommendation: Continue to accept this proposal in principle in part.
Substantiation: CFRA agrees with the panel action.
Panel Meeting Action: Reject
Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:

"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."

This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.

Number Eligible to Vote: 15
Ballot Results: Affirmative: 12 Negative: 1 Abstain: 2
Explanation of Negative:
JOHNSON: Compliance with Section 300.11 is overly restrictive for applications of communications cable installations. 300.11 is appropriate for power assemblies which are larger and heavier than communications cables. Communications cables are smaller in diameter and lighter weight. There is no justification to disallow supporting an additional communications cable by lashing it to an existing bundle of properly supported cables. Additional communications cables will not cause undue strain on the existing cable support system.
Comment on Affirmative:
OHDE: See my Affirmative Comment for Comment 16-34.
Explanation of Abstention:
DORNA: See my Explanation of Abstention for Comment 16-34.
KAHN: See my Explanation of Abstention on Comment 16-34.

16-382 Log #3853 NEC-P16 **Final Action: Reject**
(800.8, 800.3)

Submitter: Marcelo M. Hirschler, GBH International / Rep. Fire Retardant Chemicals Association
Comment on Proposal No: 16-83
Recommendation: Revise to read as follows:
800.3 Other Articles.
(A) Hybrid Power and Communications Cables. The provisions of 780.6 shall apply for listed hybrid power and communications cables in closed-loop and programmed power distribution
FPN: See 800.82(I) for hybrid power and communications cable in other applications.
(B) Hazardous (Classified) Locations. Communications circuits and equipment installed in a location that is classified in accordance with Article 500 shall comply with the applicable requirements of Chapter 5.
(C) Spread of Fire or Products of Combustion. Section 300.21 shall apply. The accessible portion of abandoned communications and multipurpose cables shall not be permitted to remain.
(D) Equipment in Other Space Used for Environmental Air. Section 300.22 (C) shall apply. Wiring methods installed in spaces covered by Section 300.22 (C) shall be permitted to extend not more than 150 mm (6 in.) beyond the limits of the space into a space covered by section 300.22 (B). Wiring methods installed in spaces covered by Section 300.22 (C) shall also be permitted to extend not more than 150 mm (6 in.) into inaccessible spaces covered by section 300.22 (C).
Substantiation: This comment has as its objective improving on the original proposal, which had as its primary intent to make it clear that wiring systems should be permitted to extend up to 6 inches into a more restrictive environment, without developing any limitations for their use in less restrictive environments.
Explanation:
* It is important that installers of wiring in plenums and other spaces used for environmental air be able to complete installations without having to change wiring methods in order to terminate their installation just outside the plenum area, because that will help them and prevent unwarranted increases in wiring installation costs. There are multiple examples in the NEC where materials are permitted to extend slightly beyond the original space, including the following: 110.26 (3), 210.52 (5) Exception, 300.50 (A) Exceptions 2 and 3, 426.22 (b), 520.42, 550.13 (G) (3), and Table 830.12. Moreover, the concept of using 6 inches as a small distance is used over 30 times in the NEC.
* This comment recognizes that CMP 16 has introduced a new concept: "inaccessible areas" of plenum spaces (or of "other spaces used for environmental air") with the intention of prohibiting some 300.22 (C) wiring methods from being used in those areas. That concept has not been approved by CMP 3 and I support that rejection. However if continued to be accepted by CMP 16 and then approved by the membership and by Standards Council, the revised articles 770, 800, 820 and 830 in NEC-2005 would contain the concept of "inaccessible areas" and create confusion by forcing some users to keep

changing wiring methods as they work their way through plenums. Acceptance of this comment would solve that problem. Of course, even if the concept of "inaccessible"areas of plenum spaces is ultimately rejected (as I feel it should), that part of this comment could then still be a useful clarification or could be eliminated after the fact by the membership, the NEC Technical Correlating Committee or Standards Council.

* This comment recommends continued rejection of a subdivision of "other spaces used for environmental air" and continued rejection of granting priority to NFPA 90A on choices of wiring methods.

* The input from CMP 3 and from the NEC Technical Coordinating Committee makes it clear that the terminology used in 300.22 has served the NEC well and needs no change. It has also become clear now that the expertise needed for choosing the type of wiring systems permitted in any space should be the prerogative of the NEC, which (through its various panels and its Technical Correlating Committee) has greater expertise and a broader view than the Technical Committee on Air Conditioning (responsible for NFPA 90A). Therefore, as a member of the Technical Committee on Air Conditioning, I believe the NEC panels should continue making their own choices regarding wiring methods.

* It has already been shown in detail by the fire hazard and fire risk analysis presented together with my original proposals (see for example the section on pages 2427-2431 of the NEC-ROP of the substantiation for this proposal of mine) that there is no need to change the requirements, or limit the application, for wiring methods in plenums, because the fire safety record is excellent.

This comment is one of a series of comments on Articles 300, 725, 760, 770, 800, 820 and 830, regarding "plenum cables". The philosophy behind all the comments is that the NEC is OK as published in 2002, but that 2 minor changes might represent improvements: (i) the clarification of the 6 inch extension of a wiring method into a more restricted environment and (ii) the clarification in the Fine Print Notes that a cable listed to NFPA 262 is listed both based on its "low-smoke" characteristics and its "low-flame-spread" characteristics, and that the two are not listed separately.

Also see comments from the chairman of the Technical Correlating Committee.

Panel Meeting Action: Reject

Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:

"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."

This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.

Number Eligible to Vote: 15

Ballot Results: Affirmative: 13 Abstain: 2

Comment on Affirmative:

OHDE: See my Affirmative Comment for Comment 16-34.

Explanation of Abstention:

DORNA: See my Explanation of Abstention for Comment 16-34.

KAHN: See my Explanation of Abstention on Comment 16-34.

16-383 Log #669 NEC-P16 **Final Action: Accept**
(800.11(A) (New))

Submitter: Charles M. Trout, Maron Electric Co. Inc.

Comment on Proposal No: 16-86

Recommendation: This proposal should be accepted.

Substantiation: The term "handhole enclosure" will be used in 314.15 Exception 300.15(L); 314.29; and 314.1 based on the unanimous acceptance of Proposals 9-15; 9-18; 9-23; 9-68; and 3-78. Based on those acceptances, it is more than probable that the term handhole enclosure will be added to Article 100 as a new definition.

Panel Meeting Action: Accept

Number Eligible to Vote: 15

Ballot Results: Affirmative: 15

16-383a Log #1917 NEC-P16 **Final Action: Accept**
(800.11(A), 820.11(A), 830.12(A))

Submitter: Frederic P. Hartwell, Hartwell Electrical Services, Inc.

Comment on Proposal No: 16-86

Recommendation: Accept the proposal.

Substantiation: CMP 9 has accepted the term within Article 314; CMP 3 has accepted it into Article 300. Although it was rejected for Article 100 by CMP 1, CMP 9 by way of a formal panel comment has officially requested that CMP 1 accept the terminology, and it almost certainly will be officially defined this way in the 2005 NEC. The TCC has officially accepted a revision to the scope of Article 314 that includes this terminology. The term "handhole enclosure" is to be the defined term because the term "handhole" is used quite differently in other places. For example, CMP 18 uses it to describe the 2-in. by 4-in. opening on the side of metal poles supporting luminaires.

Panel Meeting Action: Accept

Number Eligible to Vote: 15

Ballot Results: Affirmative: 15

16-384 Log #823 NEC-P16 **Final Action: Accept**
(800.30(A)(1)c.)

Submitter: Technical Correlating Committee on National Electrical Code®

Comment on Proposal No: 16-89

Recommendation: The Technical Correlating Committee directs that the Panel clarify what the words "suitable for this purpose" mean, and clarify the Panel Statement on this Proposal renumbering this section to 800.80(A). This section was not moved to 800.80. Proposal 16-91 deletes 800.31 and moves it to 800.80(A). This action will be considered by the Panel as a Public Comment.

Substantiation: This is a direction from the National Electrical Code Technical Correlating Committee in accordance with 3-4.2 and 3-4.3 of the Regulations Governing Committee Projects.

Panel Meeting Action: Accept

Panel Statement: CMP 16 accepts the direction of the TCC to review Proposal 16-89.

See CMP 16 action and statement on Comment 16-385.

Number Eligible to Vote: 15

Ballot Results: Affirmative: 15

16-385 Log #1193 NEC-P16 **Final Action: Accept**
(800-30(A)(1)(c))

Submitter: James E. Brunssen, Telcordia Technologies, Inc.

Comment on Proposal No: 16-89

Recommendation: Revise 800.30(A)(1)(c) as follows:
(c) Where insulated conductors in accordance with 800.12(A) or (B) are used to extend circuits to a building from other than a cable with metallic sheath member(s) if (1) the primary protector is listed as being suitable for this purpose for application with circuits extending from other than a cable with metallic sheath members, and (2) the connections of the insulated conductors to the exposed plant or the conductors of the exposed plant safely fuse on all currents greater than the current-carrying capacity of the primary protector, or associated insulated conductors and of the primary protector grounding conductor.

Substantiation: The Technical Correlating Committee (TCC) has directed CMP 16 to clarify what is meant by the words "suitable for this purpose". The proposed revised text above is intended to satisfy the TCC directive.

Panel Meeting Action: Accept

Number Eligible to Vote: 15

Ballot Results: Affirmative: 15

16-386 Log #824 NEC-P16 **Final Action: Accept**
(800.30(A)(1)e.)

Submitter: Technical Correlating Committee on National Electrical Code®

Comment on Proposal No: 16-90

Recommendation: The Technical Correlating Committee directs that the Panel clarify what the words "suitable for this purpose" mean. This action will be considered by the Panel as a Public Comment.

Substantiation: This is a direction from the National Electrical Code Technical Correlating Committee in accordance with 3-4.2 and 3-4.3 of the Regulations Governing Committee Projects.

Panel Meeting Action: Accept

Panel Statement: CMP 16 accepts the direction of the TCC to review Proposal 16-90.

See CMP 16 action and statement on Comment 16-387.

Number Eligible to Vote: 15

Ballot Results: Affirmative: 15

16-387 Log #1194 NEC-P16 **Final Action: Accept**
(800-30(A)(1)(e))

Submitter: James E. Brunssen, Telcordia Technologies, Inc.
Comment on Proposal No: 16-90
Recommendation: Revise 800.30(A)(1)(e) as follows:
(e) Where insulated conductors in accordance with 800.12(A) are used to extend circuits to a building from cable with an effectively grounded metallic sheath member(s) and if (1) the combination of the primary protector and insulated conductors is listed as being suitable for this purpose for application with circuits extending from a cable with an effectively grounded metallic sheath member(s),
and (2) the insulated conductors safely fuse on all currents greater than the current-carrying capacity of the primary protector and of the primary protector grounding conductor.
Substantiation: The Technical Correlating Committee (TCC) has directed CMP 16 to clarify what is meant by the words "suitable for this purpose". The proposed revised text above is intended to satisfy the TCC directive.
Panel Meeting Action: Accept
Number Eligible to Vote: 15
Ballot Results: Affirmative: 15

16-388 Log #4 NEC-P16 **Final Action: Reject**
(800.40(A)(4))

Submitter: Steven C. Johnson, Time Warner Cable / Rep. National Cable Telecommunications Association
Comment on Proposal No: 16-96
Recommendation: Delete the following proposed FPN:
"FPN: Similar grounding conductor length limitations applied at apartment buildings and commercial buildings will help to reduce voltages that may be developed between the building's power and communications systems during lightning events."
Substantiation: The proposed maximum grounding conductor length of 20 ft was chosen somewhat arbitrarily. There was no evidence presented to indicate that the current requirement of "as short as practicable" has been less than sufficient from a safety standpoint.
Panel Meeting Action: Reject
Panel Statement: Inclusion of the FPN would encourage the application of the 20-foot rule to apartment and commercial buildings, thereby helping to reduce voltages that may develop between the building's power and communications systems during lightning events.
Number Eligible to Vote: 15
Ballot Results: Affirmative: 14 Negative: 1
Explanation of Negative:
JOHNSON: My contention remains that the proposed maximum grounding conductor length of 20 feet was chosen somewhat arbitrarily. There was no evidence presented to indicate that the current requirement of "as short as practicable" has been less than sufficient from a safety standpoint.**Comment on Affirmative:**
BRUNSSEN: Continued rejection of this comment will help to reduce voltages that may be developed between the building's power and communications systems during lightning events.

16-389 Log #1195 NEC-P16 **Final Action: Accept**
(800.40(A)(4))

Submitter: James E. Brunssen, Telcordia Technologies, Inc.
Comment on Proposal No: 16-96
Recommendation: CMP 16 is urged to continue to accept proposal 16-96.
Substantiation: By continuing to accept proposal 16-96, the added FPN will encourage the application of the 20-foot rule to apartment buildings and commercial buildings and will help reduce voltages that may be developed between the building's power and communications systems during lightning events. The wording of the FPN, as accepted by CMP 16, is not in violation of the NEC style manual as it is merely informative and does not contain mandatory language.
Panel Meeting Action: Accept
Number Eligible to Vote: 15
Ballot Results: Affirmative: 14 Negative: 1
Explanation of Negative:
JOHNSON: My contention remains that the proposed maximum grounding conductor length of 20 feet was chosen somewhat arbitrarily. There was no evidence presented to indicate that the current requirement of "as short as practicable" has been less than sufficient from a safety standpoint.**Comment on Affirmative:**
BRUNSSEN: Continued acceptance of this comment, as well as the original proposal, will help to reduce voltages that may be developed between the building's power and communications systems during lightning events.

16-390 Log #3551 NEC-P16 **Final Action: Accept**
(800.40(A)(4))

Submitter: Percy E. Pool, Verizon NS
Comment on Proposal No: 16-96
Recommendation: CMP 16 is ured to continue to accept Proposal 16-96.
Substantiation: The proposed FPN will encourage the application of the 20-foot rule to apartment buildings and commercial buildings. The applicaton of the proposed FPN will help to reduce voltages that may develop between the building's power and communications systems during lightning events. The proposed FPN, as accepted by CMP 16, does not contain mandory language so there is no violation of the NEC Style Manual. The proposed FPN is purely informative.
Panel Meeting Action: Accept
The proposed FPN will encourage the application of the 20-foot rule to apartment buildings and commercial buildings. The application of the proposed FPN will help t reduce voltages that may develop between the building's power and communications systems during lightning events. The proposed FPN, as accepted by CMP 16 does not contain mandatory language so there is no violation of the NEC Style Manual. The proposed FPN is purely informative.
Number Eligible to Vote: 15
Ballot Results: Affirmative: 14 Negative: 1
Explanation of Negative:
JOHNSON: My contention remains that the proposed maximum grounding conductor length of 20 feet was chosen somewhat arbitrarily. There was no evidence presented to indicate that the current requirement of "as short as practicable" has been less than sufficient from a safety standpoint.
Comment on Affirmative:
BRUNSSEN: Continued acceptance of this comment, as well as the original proposal, will help to reduce voltages that may be developed between the building's power and communications systems during lightning events.

16-391 Log #236 NEC-P16 **Final Action: Accept in Principle**
(800.50)

Submitter: Technical Committee on Air Conditioning
Comment on Proposal No: 16-107
Recommendation: Continue to accept this proposal.
Substantiation: Continued acceptance of this proposal will remove a conflict between NFPA 70 and NFPA 90A. NFPA 90A does not permit cables that are not listed for the application in air ducts, ceiling cavity plenums, raised floor plenums, duct distribution plenums, apparatus casing plenums and air-handling room plenums.
Panel Meeting Action: Accept in Principle
Revise 800.50 Exception No. 3 as follows:
"Exception No. 3: Unlisted outside plant communications cables shall be permitted within buildings in spaces other than risers, air ducts, plenums, and other space used for environmental air, where the length of unlisted communications cable within the building, measured from its point of entrance, does not exceed 15 m (50 ft) and the unlisted communications cable enters the building from the outside and is terminated in an enclosure or on a listed primary protector."
Panel Statement: The revised text accomplishes the same objective as the original proposal without requiring the definition of all the plenum spaces.
Number Eligible to Vote: 15
Ballot Results: Affirmative: 13 Negative: 2
Explanation of Negative:
JENSEN: Delete the term "air duct" in the Panel meeting action of Exception No. 1. Air ducts are not defined and this comment goes against Standards Council Decision 03-10-25. OHDE: I am voting negative on both the panel action and panel statement. The revised Section 800.50 Exception No. 3 as stated in Comment 16-391 uses the term "air duct". The original source of the definition of "air duct" was the NFPA 90A-2002 Standard and acceptance of this definition would be in violation of Standards Council Decision 03-10-25. As a last minute ditch effort, the definition of "air duct" was retained because it appeared in another NFPA document. The definition of "air duct" is an extract from NFPA 97-2003.

16-392 Log #237 NEC-P16 **Final Action: Accept in Principle**
(800.50)

Submitter: Technical Committee on Air Conditioning
Comment on Proposal No: 16-106
Recommendation: Continue to accept this proposal in principle.
Substantiation: See the comment from the Technical Committee on Air Conditioning on proposal 16-107.
Panel Meeting Action: Accept in Principle
Panel Statement: See panel action and statement on Comment 16-391.
Number Eligible to Vote: 15
Ballot Results: Affirmative: 13 Negative: 2

Explanation of Negative:
JENSEN: Delete the term "air duct" in the Panel meeting action of Exception No. 1. Air ducts are not defined and this comment goes against Standards Council Decision 03-10-25. OHDE: See my Explanation of Negative vote on Comment 16-391.

16-393 Log #238 NEC-P16 **Final Action: Accept in Principle**
(800.50)

Submitter: Technical Committee on Air Conditioning
Comment on Proposal No: 16-102
Recommendation: Continue to accept this proposal in principle.
Substantiation: See the comment from the Technical Committee on Air Conditioning on proposal 16-107.
Panel Meeting Action: Accept in Principle
Panel Statement: See panel action and statement on Comment 16-391.
Number Eligible to Vote: 15
Ballot Results: Affirmative: 13 Negative: 2
Explanation of Negative:
JENSEN: Delete the term "air duct" in the Panel meeting action of Exception No. 1. Air ducts are not defined and this comment goes against Standards Council Decision 03-10-25. OHDE: See my Explanation of Negative vote on Comment 16-391.

16-394 Log #283 NEC-P16 **Final Action: Accept**
(Table 800.50)

Submitter: Technical Committee on Air Conditioning
Comment on Proposal No: 16-104
Recommendation: Continue to accept this proposal in part.
Substantiation: The Technical Committee on Air Conditioning supports the panel action on this proposal.
Panel Meeting Action: Accept
Number Eligible to Vote: 15
Ballot Results: Affirmative: 15

16-395 Log #323 NEC-P16 **Final Action: Reject**
(Table 800.50)

Submitter: Technical Committee on Air Conditioning
Comment on Proposal No: 16-105
Recommendation: Continue to accept this proposal in principle.
Substantiation: See the comment from the Technical committee on Air Conditioning on proposal 16-112.
Panel Meeting Action: Reject
Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:
"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."
This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.
Number Eligible to Vote: 15
Ballot Results: Affirmative: 13 Abstain: 2
Comment on Affirmative:
OHDE: See my Affirmative Comment for Comment 16-34.
Explanation of Abstention:
DORNA: See my Explanation of Abstention for Comment 16-34.
KAHN: See my Explanation of Abstention on Comment 16-34.

16-396 Log #488 NEC-P16 **Final Action: Accept in Principle**
(800.50)

Submitter: Allen C. Weidman, The Society of the Plastics Industry, Inc.
Comment on Proposal No: 16-107
Recommendation: Continue to Accept this proposal.
Substantiation: Continued acceptance of this proposal will improve fire safety by prohibiting non-fire-resistant cables from being run in air ducts, ceiling cavity plenums, raised floor plenums, duct distribution plenums, apparatus casing plenums and air-handling room plenums.
Panel Meeting Action: Accept in Principle
Panel Statement: See panel action and statement on Comment 16-391.
Number Eligible to Vote: 15
Ballot Results: Affirmative: 13 Negative: 2
Explanation of Negative:
JENSEN: Delete the term "air duct" in the Panel meeting action of Exception No. 1. Air ducts are not defined and this comment goes against Standards Council Decision 03-10-25. OHDE: See my Explanation of Negative vote on Comment 16-391.

16-397 Log #1498 NEC-P16 **Final Action: Accept in Principle**
(800.50)

Submitter: Marcelo M. Hirschler, GBH International / Rep. Fire Retardant Chemicals
Comment on Proposal No: 16-102
Recommendation: 800.50 Exception No. 3: Exception No. 1: Unlisted outside plant communications cables shall be permitted within buildings in spaces other than risers, ducts, plenums and other air-handling spaces (as described in Section 300.22), ~~air ducts, ceiling cavity plenums, raised floor plenums, duct distribution plenums, apparatus casing plenums, and air-handling unit room plenums~~ where the length of unlisted communications cable within the building, measured from its point of entrance, does not exceed 15 m (50 ft) and the unlisted outside plant communications cable enters the building from the outside and is terminated in an enclosure.
Substantiation: The language in this exception should refer to the sections of the code as described in Article 300, since there is no need to introduce these new designations of subdivisions of plenum spaces. The creation of these new subdivisions should not be accepted. The terminology in NEC 2002 is correct and needs no change.
See also the substantiation for my comments on proposal 16-59.
Panel Meeting Action: Accept in Principle
Panel Statement: See panel action and statement on Comment 16-391. See panel action and panel statement on Comment 16-391, which is editorially similar and accomplishes the submitter's purpose.
Number Eligible to Vote: 15
Ballot Results: Affirmative: 14 Negative: 1
Explanation of Negative:
OHDE: I am voting negative on both the panel action and panel statement. This comment should have been accepted as written. The panel action for Comment 16-391 is not editorially similar nor does it accomplish the submitter's intent. The submitter submitted the following language: ... ducts, plenums and other air handling spaces (as described in Section 300.22 ...) The revised Section 800.50 Exception No. 3 as stated in Comment 16-391 uses the term "air duct". The original source of the definition of "air duct" was the NFPA 90A-2002 Standard and acceptance of this definition would be in violation of Standards Council Decision 03-10-25. As a last minute ditch effort, the definition of "air duct" was retained because it appeared in another NFPA document. The definition of "air duct" is an extract from NFPA 97-2003.

16-398 Log #1746 NEC-P16 **Final Action: Accept**
(Table 800.50)

Note: See the Technical Correlating Committee Note on Comment 16-452.
Submitter: Michael I. Callanan, IBEW
Comment on Proposal No: 16-105
Recommendation: Reject this proposal.
Substantiation: This proposal should be rejected as we agree with the explanation of negative of Mr. Jensen, Mr. Jones, and Mr. Ohde. This comment represents the official position of the International Brotherhood of Electrical Workers Codes and Standards Committee.
Panel Meeting Action: Accept
Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:
"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."
This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.
Number Eligible to Vote: 15
Ballot Results: Affirmative: 13 Abstain: 2
Comment on Affirmative:
OHDE: See my Affirmative Comment for Comment 16-34.
Explanation of Abstention:
DORNA: See my Explanation of Abstention for Comment 16-34.
KAHN: See my Explanation of Abstention on Comment 16-34.

16-399 Log #2224 NEC-P16 **Final Action: Accept**
(Table 800.50)

Note: See the Technical Correlating Committee Note on Comment 16-452.
Submitter: T. David Mills, Bechtel Savannah River, Inc.
Comment on Proposal No: 16-105
Recommendation: Reject proposal in its entirety.
Substantiation:NFPA 90A - 2002 only places a restriction for cables and for testing per NFPA 262 for ceiling cavity plenums (4.3.10.2.6.1) and raised floor plenums (4.3.10.6.5.1). It does not state that these are the only places that this plenum rated cable can be used.
The other sections of NFPA 90A related to all other air spaces including "air ducts" are silent with respect to cable requirements. This indicates plenum rated cables can be placed anywhere in the air conditioning air handling system without any new "Duct" designator. There are not any other requirements in NFPA 90A to indicate anywhere that a "does not correlate" situation exists between NFPA 70 and NFPA 90A.There is no need for any additional environmental air space identifiers or cable type designators.
Panel Meeting Action: Accept
Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:
"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."
This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.
Number Eligible to Vote: 15
Ballot Results: Affirmative: 13 Abstain: 2
Comment on Affirmative:
OHDE: See my Affirmative Comment for Comment 16-34.
Explanation of Abstention:
DORNA: See my Explanation of Abstention for Comment 16-34.
KAHN: See my Explanation of Abstention on Comment 16-34.

16-400 Log #2320 NEC-P16 **Final Action: Accept**
(800.50)

Note: See the Technical Correlating Committee Note on Comment 16-452.
Submitter: Frank Bisbee, Communication Planning Corporation
Comment on Proposal No: 16-105
Recommendation: Reject this proposal.
Substantiation: In recognizing the use of "duct cable" or "limited combustible cable," the proposal fails to consider toxicity of the newly specified product and the relative incapacitation factor presented by the chemical constituents of the polymer in new cable design. A recent study by the NFPA Fire Protection Research Foundation has advanced an international effort to make certain that people can escape a burning building before being incapacitated (overcome by smoke or gases generated by thermal decomposition). The work is part of a revolution in fire safety in which codes and standards are beginning to address how much smoke, or gases generated by thermal decomposition, will incapacitate people, rather than how much will kill them.
The jacketing and insulating materials used in duct cable and limited combustible cable are subject to heat decomposition and the emission of sub-lethal toxic fumes. Some of these fumes can incapacitate (blinding and choking) the building occupants. The requirements for using "duct cable" have failed to recognize toxicity or emissions that are essentially colorless (i.e. hydrogen fluoride, which converts to hydrofluoric acid upon contact with any moisture, and other toxic gases may be generated).
In 2002, the ISO (International Organization for Standardization), a network of the industrial-standards institutes of 147 countries, put forth a new standard calling for attention to the "sub-lethal" effects of smoke - when the heat, the thickness of smoke, and the toxic gases in smoke will block vision, make a person choke or tear up, or render a person unconscious. Because of this new ISO standard, these effects of smoke are supposed to be taken into account when regulating the size and placement of exits and the types of materials allowed in buildings. But to meet the standard, one needs to know more about the smoke produced by burning various materials. Working with the National Institute of Standards and Technology, the FPRF is laying the scientific groundwork needed to put the new standard into practice. The foundation recently completed the project's second phase of its International study of the Sub-lethal Effects of Fire Smoke on Survivability and Health. In the most recent phase of the study, the foundation's researchers performed three tests: They burned a sofa made of upholstered cushions on a steel frame, some particle board bookcases, and some household cable. In each case, the materials were burned in a room with a long adjacent corridor. The researchers measured the toxic gases emitted by each item, and how quickly the gases filled the room and moved down the corridor. They determined when and where in the room and in the hallway people would have to stop because of the smoke or the heat. Fire-test laboratories and manufacturers are expected to use this data to develop smaller-scale tests that can be done in a laboratory, so they won't need to set a room on fire every time they test a product. FPRF is uniquely equipped to conduct such studies, and NFPA officials expect more lives to be saved because of the new fire-safety standards that will emerge from this work.
By allowing and specifying the use of "duct cable," this proposal supports the use of materials counter to the findings already available in the public domain regarding sub-lethal toxicity of hydrogen fluoride and through the NFPA Fire Protection Research Foundation regarding incapacitation factors. Polymers used in duct cable and other limited combustible cable materials far exceed the incapacitation factor of other materials used in various cable construction both in generation of sub-lethal constituents and in hypertoxicity.
Panel Meeting Action: Accept
Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:
"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."
This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.
Number Eligible to Vote: 15
Ballot Results: Affirmative: 13 Abstain: 2
Comment on Affirmative:
OHDE: See my Affirmative Comment for Comment 16-34.
Explanation of Abstention:
DORNA: See my Explanation of Abstention for Comment 16-34.
KAHN: See my Explanation of Abstention on Comment 16-34.

16-401 Log #2447 NEC-P16 **Final Action: Accept**
(Table 800.50)

Note: See the Technical Correlating Committee Note on Comment 16-452.
Submitter: William A. Wolfe, Steel Tube Institute of North America
Comment on Proposal No: 16-105
Recommendation: Reject this proposal.
Substantiation:
See our companion proposal on 16-37.
Panel Meeting Action: Accept
Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:
"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."
This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.
Number Eligible to Vote: 15
Ballot Results: Affirmative: 13 Abstain: 2
Comment on Affirmative:
OHDE: See my Affirmative Comment for Comment 16-34.
Explanation of Abstention:
DORNA: See my Explanation of Abstention for Comment 16-34.
KAHN: See my Explanation of Abstention on Comment 16-34.

16-402 Log #2722 NEC-P16 **Final Action: Reject**
(Table 800.50)

Submitter: Richard Fransen, Daikin America, Inc. / Rep. Cable Fire Research Association
Comment on Proposal No: 16-105
Recommendation: Continue to accept this proposal in principle.
Substantiation: See the comment from CFRA on proposal 16-112.
Panel Meeting Action: Reject

Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:

"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."

This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.

Number Eligible to Vote: 15
Ballot Results: Affirmative: 13 Abstain: 2
Comment on Affirmative:
OHDE: See my Affirmative Comment for Comment 16-34.
Explanation of Abstention:
DORNA: See my Explanation of Abstention for Comment 16-34.
KAHN: See my Explanation of Abstention on Comment 16-34.

16-403 Log #2809 NEC-P16 **Final Action: Reject**
(Table 800.50)

Submitter: Richard P. Owen, City of St. Paul, Minnesota
Comment on Proposal No: 16-105
Recommendation: Continue to accept in principle.
Substantiation: The Panel 3/Panel 16 Task Group, appointed by the NEC TCC, developed this comment.

The task group agrees with Panel 16's action and statement.

The NEC TCC Task Group on Correlation Issues Between Panels 3 and 16 met three times via teleconference calls. The assignment by the TCC Chairman was to attempt to develop a resolution and accompanying comments for the different actions taken on proposals dealing with similar issues by CMP 3 and CMP 16 for their respective Articles in Chapters 7 and 8 of the NEC.

The Task Group studied the issues and determined that there were five major differences in the actions on proposals concerning Articles 725, 760, 770, 800, 820, and 830. The voting on these issues was not unanimous but did pass as at least a simple majority of the Task Group.

One of the major differences involved installing air duct cables in a fabricated air duct without enclosing the cable in a metal raceway.

The Task Group members who attended the teleconference call voted to accept text that permits "air duct cable" to be installed in fabricated ducts without enclosing in an additional metal raceway or metal cable. The text to be accepted by Panel 3 is recommended to be similar to that found in Proposals 3-194 for Article 725 and 3-288 for Article 760. The "air duct cable" will replace the plenum cable that was previously acceptable in fabricated duct without enclosing in a metal raceway or metal cable assembly.

The following members of Panels 3 and 16 participated in this Task Group assignment: From Panel 3, Mr. Sanford E. Egesdal representing the Automatic Fire Alarm Association, Inc., Mr. Ronald E. Maassen representing the National Electrical Contractors Association, and Mr. Mark C. Ode representing Underwriters Laboratories Inc. From Panel 16, Mr. Robert W. Jensen representing the Building Industry Consulting Services International, Mr. Harold C. Ohde representing the International Brotherhood of Electrical Workers, and Mr. Joseph W. Rao representing the Independent Electrical Contractors, Inc. Mr. Richard P. Owen, the Chairman of CMP 3, representing the International Association of Electrical Inspectors, was the chairman of the Task Group.

Panel Meeting Action: Reject
Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:

"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."

This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.

Number Eligible to Vote: 15
Ballot Results: Affirmative: 13 Abstain: 2
Comment on Affirmative:
OHDE: See my Affirmative Comment for Comment 16-34.
Explanation of Abstention:
DORNA: See my Explanation of Abstention for Comment 16-34.
KAHN: See my Explanation of Abstention on Comment 16-34.

16-404 Log #2518ooo NEC-P16 **Final Action: Accept**
(Table 800.50)

Note: See the Technical Correlating Committee Note on Comment 16-452.
Submitter: Vince Baclawski, National Electrical Manufacturers Association (NEMA)
Comment on Proposal No: 16-105
Recommendation: Reject this proposal.
Substantiation: See our companion comment on Proposal 1-69.
Panel Meeting Action: Accept
Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:

"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."

This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.

Number Eligible to Vote: 15
Ballot Results: Affirmative: 13 Abstain: 2
Comment on Affirmative:
OHDE: See my Affirmative Comment for Comment 16-34.
Explanation of Abstention:
DORNA: See my Explanation of Abstention for Comment 16-34.
KAHN: See my Explanation of Abstention on Comment 16-34.

16-405 Log #3787 NEC-P16 **Final Action: Accept**
(800.50)

Note: See the Technical Correlating Committee Note on Comment 16-452.
Submitter: Marcelo M. Hirschler, GBH International / Rep. Fire Retardant Chemicals Association
Comment on Proposal No: 16-105
Recommendation: *Reject this proposal - Also reject the references to NFPA 90A in fine print notes and the creation of the new category of air duct cables and the subdivision of plenums. Revise the FPN to 800.51 as follows, and make no other changes.*

~~FPN: One method of defining low smoke-producing cables is by establishing an acceptable value of the smoke produced when tested in accordance with NFPA 262-1999, Standard Method of Test for Flame Travel and Smoke of Wires and Cables for Use in Air-Handling Spaces, to a maximum peak optical density of 0.5 and a maximum average optical density of 0.15. Similarly, one method of defining fire-resistant cables is by defining maximum allowable flame travel distance of 1.52 m (5 ft) when tested in accordance with the same test.~~

FPN: One method of defining a cable that is low smoke-producing cable and fire-resistant cable is that the cable exhibits a maximum peak optical density of 0.5 or less, an average optical density of 0.15 or less, and a maximum flame spread distance of 1.52 m (5 ft) or less when tested in accordance with NFPA 262, Standard Method of Test for Flame Travel and Smoke of Wires and Cables for Use in Air-Handling Spaces.

Substantiation: There is no need for a new category of CMD cables. There is also no justification for limiting the use of traditional plenum cables. It has become clear now that the expertise needed for choosing the type of wiring systems permitted in any space should be the prerogative of the NEC, which (through its various panels and its Technical Correlating Committee) has greater expertise and a broader view than the Technical Committee on Air Conditioning (responsible for NFPA 90A). Therefore, the NEC panels should continue making their own choices regarding wiring methods. The issue of correlation (or even reference) to either NFPA 90A or the categories of plenums used in NFPA 90A should be rejected by CMP 16.

Furthermore, the reference to NFPA 90A is not appropriate in the Fine Print Note, since NFPA 90A is not a suitable standard for testing or listing wiring methods. The logical way to have a fine print note is to reference the standard used for testing the fire safety of the materials, which in this case is a combination of NFPA 255 and NFPA 259, or the UL Subject 2424 that contains all the listing requirements.

See further information in the comment I made to recommend rejection of proposal 16-112.

Panel Meeting Action: Accept

Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:

"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."

This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.

Number Eligible to Vote: 15
Ballot Results: Affirmative: 13 Abstain: 2
Comment on Affirmative:
OHDE: See my Affirmative Comment for Comment 16-34.
Explanation of Abstention:
DORNA: See my Explanation of Abstention for Comment 16-34.
KAHN: See my Explanation of Abstention on Comment 16-34.

16-406 Log #2139 NEC-P16 **Final Action: Accept**
(800.50, 800-51 and 800-53)

Note: See the Technical Correlating Committee Note on Comment 16-452.
Submitter: Robert W. Jensen, dbi-Telecommunications
Comment on Proposal No: 16-112
Recommendation: Delete listing requirements for "duct cable." Modify to Read: "Cables shall not be directly placed in air ducts."
Substantiation: All materials that are capable of combustion are a fuel source during a fire event. The proposed air-duct cable is capable of combustion and would, during a fire event, be a fuel source inside the ducts that supply conditioned air to the conditioned spaces.

Heating, ventilating and air conditioning systems are commonly designed with ducts that supply conditioned air to the conditioned spaces (as described in 300.22 Wiring in Ducts, Plenums, and Other Air-Handling Spaces (B) Ducts or Plenums Used for Environmental Air), and use the space above the suspended ceiling to transport return air from the conditioned spaces to the conditioning equipment (as described in 300.22 Wiring in Ducts, Plenums, and Other Air-Handling Spaces (C) Other Space Used for Environmental Air). This would be the case during normal operation. But during a fire event, when smoke is detected by a smoke detector in the space above the suspended ceiling, the fire/smoke damper closes and the smoke and toxic gases are diverted out of the building. When the source of the fire is inside the air supply duct, either the cable or the equipment that it is connecting to, the positive pressure created by the fan would then force the smoke and toxic gases into the conditioned space. This would continue until such time that sufficient smoke would enter the space above the suspended ceiling and be detected by a smoke detector. While one could argue that smoke detectors could also be placed in air supply ducts, the velocity of the air in supply ducts would make smoke detection problematic and there are no smoke detectors currently available listed for the purpose of installation within air supply ducts.

Building codes specify where fire dampers are required. Fire dampers are installed to prevent transmission of flame where air supply ducts penetrate fire barriers. Running loose cables within an air supply duct would block the dampers from closing allowing the flame to breach the fire barrier. Such an installation would NEVER pass during a building inspection. If cables MUST be placed inside an air supply duct, then the cable MUST be placed in an electrical metallic tubing, flexible metallic tubing, intermediate metal conduit, or rigid metal conduit without an overall nonmetallic covering as prescribed on 300.22 Wiring in Ducts, Plenums, and Other Air-Handiling Spaces (B) Ducts or Plenums Used for Environmental Air. Use of these raceways negates any need for any additional level being added to Table 800.50 Cable Markings, or any other table or section in the code.

NFPA 90A 4.1, General Requirements for Equipment paragraph 4.1.4 specifies, "Electrical wiring and equipment shall be installed in accordance to NFPA 70, National Electrical Code." Seems like the authors of NFPA 90A, the Technical Committee on Air Conditioning already realized that NFPA 70 is sufficient for their needs.

Panel Meeting Action: Accept
Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:

"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."

This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.

Number Eligible to Vote: 15
Ballot Results: Affirmative: 13 Abstain: 2
Comment on Affirmative:
OHDE: See my Affirmative Comment for Comment 16-34.
Explanation of Abstention:
DORNA: See my Explanation of Abstention for Comment 16-34.
KAHN: See my Explanation of Abstention on Comment 16-34.

16-407 Log #3001 NEC-P16 **Final Action: Accept**
(800.50, 800-51 and 800.53)

Note: See the Technical Correlating Committee Note on Comment 16-452.
Submitter: Donald Billow, ICC
Comment on Proposal No: 16-112
Recommendation: Delete listing requirements for "duct cable". Modify to read "Cables shall not be directly placed in air ducts."
Substantiation: • Air systems are generally designed with supply ducts that feed the occupied area with returns built into the structure (ceiling space, floor). When a fire is detected, smoke dampers close and divert smoke and toxic gases to the building's exterior. Duct cable is not non-combustible, rather it is a fuel source. There are no provisions for a listed device to detect a toxic burning "duct cable" in the supply duct. Additionally, the toxic smoke would have to emanate from the air outlets within the building causing an unsafe environment until the smoke detector sensor could actuate the smoke dampers into action. Placing this cable directly in the air duct is unsafe to the occupants of the building and fire rescue personnel that may be dispatched tot he incident. Rather than place this added fuel into a duct, the cable should be placed in non-combustible conduit and routed to the device within the duct.

• All buildings that are built having a certain risk factor. Listed plenum cables currently installed within buildings have not been shown to raise the risk factor as there are no incidents sustained in any proposals to warrant a change.

• Air flow, per code, is difficult to achieve in many buildings. The addition of toxic cable will deter what can be delivered. There are no proposals that offer the amount of these toxic cables that can occupy an air duct. Additionally, the installation of cable within an air duct, depending upon the velocity of the air, will cause noise in the environment and unsafe working conditions.

• Cable placed in ducts will cause fire dampers to be restricted from closing. This is not only restricting a fire dampers use, it causes and unsafe environment for occupants in the buildings during a fire emergency.

• Cables in air ducts will be subject to damage by installers that use sheet metal screws when maintaining air ducts. These screws are very sharp and will penetrate the sheath causing an electrical arc and possible fire from dust accumulation in air duct.

• Air ducts will not be able to be cleaned without damaging cables placed within the air duct.

• Air distribution is specified in 4.3 of NFPA 90A and includes 4.3.10 for plenums. These plenums include ceiling cavity plenums (4.3.10.2), duct distribution plenum (4.3.10.3), apparatus casing plenum (4.3.10.4), air handling unit room plenum (4.3.10.5), and raised floor plenum (4.3.10.6). While requirements are specified for cable placed in ceiling cavity plenums and raised floor plenums (non-combustible or limited combustible with smoke requirements per NFPA 262), there are no like requirements for duct distribution plenum, or apparatus casing plenum, or air handling unit room plenum - rather they specify NFPA 255 for testing building materials. As for other areas specified in 4.2, Air Distribution, there are no requirements for cable placement in the air distribution system. Following back to 4.2, General Requirements for Equipment, paragraph 4.1.4 specifies, "electrical wiring and equipment shall be installed in accordance to NFPA 70, National Electrical Code". Seems like NFPA 90A realizes that NFPA 70 is sufficient for their need.

• NFPA 90A scope is specified for buildings that are 25,000 cubic feet or 3 stories in height. The NEC does not have this restriction. Harmonizing the code to this standard is inappropriate.

Panel Meeting Action: Accept
Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:

"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."

This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.

Number Eligible to Vote: 15
Ballot Results: Affirmative: 13 Abstain: 2
Comment on Affirmative:
OHDE: See my Affirmative Comment for Comment 16-34.
Explanation of Abstention:
DORNA: See my Explanation of Abstention for Comment 16-34.
KAHN: See my Explanation of Abstention on Comment 16-34.

16-408 Log #3786 NEC-P16 **Final Action: Accept**
(800.50, 800.51, 800.53)

Submitter: Marcelo M. Hirschler, GBH International / Rep. Fire Retardant Chemicals Association
Comment on Proposal No: 16-110
Recommendation: *Continue rejecting this proposal - Also reject the reference to NFPA 90A.*
Substantiation: There is no need for a new category of CMD cables. There is also no justification for limiting the use of traditional plenum cables. It has become clear now that the expertise needed for choosing the type of wiring systems permitted in any space should be the prerogative of the NEC, which (through its various panels and its Technical Correlating Committee) has greater expertise and a broader view than the Technical Committee on Air Conditioning (responsible for NFPA 90A). Therefore, the NEC panels should continue making their own choices regarding wiring methods. The issue of correlation (or even reference) to either NFPA 90A or the categories of plenums used in NFPA 90A should be rejected by CMP 16.

Furthermore, the reference to NFPA 90A is not appropriate in the Fine Print Note, since NFPA 90A is not a suitable standard for testing or listing wiring methods. The logical way to have a fine print note is to reference the standard used for testing the fire safety of the materials, which in this case is a combination of NFPA 255 and NFPA 259, or the UL Subject 2424 that contains all the listing requirements.

See further information in the comment I made to recommend rejection of proposal 16-112.
Panel Meeting Action: Accept
Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:

"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."

This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.
Number Eligible to Vote: 15
Ballot Results: Affirmative: 13 Abstain: 2
Comment on Affirmative:
OHDE: See my Affirmative Comment for Comment 16-34.
Explanation of Abstention:
DORNA: See my Explanation of Abstention for Comment 16-34.
KAHN: See my Explanation of Abstention on Comment 16-34.

16-409 Log #3790 NEC-P16 **Final Action: Accept**
(800.50, 800.51, 800.53)

Note: See the Technical Correlating Committee Note on Comment 16-452.
Submitter: Marcelo M. Hirschler, GBH International / Rep. Fire Retardant Chemicals Association
Comment on Proposal No: 16-111
Recommendation: *Reject this proposal - Also reject the references to NFPA 90A in fine print notes and the creation of the new category of air duct cables and the subdivision of plenums. Revise the FPN to 800.51 as follows, and make no other changes.*

~~FPN: One method of defining low smoke-producing cables is by establishing an acceptable value of the smoke produced when tested in accordance with NFPA 262-1999, Standard Method of Test for Flame Travel and Smoke of Wires and Cables for Use in Air-Handling Spaces, to a maximum peak optical density of 0.5 and a maximum average optical density of 0.15. Similarly, one method of defining fire-resistant cables is by defining maximum allowable flame travel distance of 1.52 m (5 ft) when tested in accordance with the same test.~~

FPN: One method of defining a cable that is low smoke-producing cable and fire-resistant cable is that the cable exhibits a maximum peak optical density of 0.5 or less, an average optical density of 0.15 or less, and a maximum flame spread distance of 1.52 m (5 ft) or less when tested in accordance with NFPA 262, Standard Method of Test for Flame Travel and Smoke of Wires and Cables for Use in Air-Handling Spaces.
Substantiation: There is no need for a new category of CMD cables. There is also no justification for limiting the use of traditional plenum cables. It has become clear now that the expertise needed for choosing the type of wiring systems permitted in any space should be the prerogative of the NEC, which (through its various panels and its Technical Correlating Committee) has greater expertise and a broader view than the Technical Committee on Air Conditioning (responsible for NFPA 90A). Therefore, the NEC panels should continue making their own choices regarding wiring methods. The issue of correlation (or even reference) to either NFPA 90A or the categories of plenums used in NFPA 90A should be rejected by CMP 16.

Furthermore, the reference to NFPA 90A is not appropriate in the Fine Print Note, since NFPA 90A is not a suitable standard for testing or listing wiring methods. The logical way to have a fine print note is to reference the standard used for testing the fire safety of the materials, which in this case is a combination of NFPA 255 and NFPA 259, or the UL Subject 2424 that contains all the listing requirements.

See further information in the comment I made to recommend rejection of proposal 16-112.
Panel Meeting Action: Accept
Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:

"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."

This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.
Number Eligible to Vote: 15
Ballot Results: Affirmative: 13 Abstain: 2
Comment on Affirmative:
OHDE: See my Affirmative Comment for Comment 16-34.
Explanation of Abstention:
DORNA: See my Explanation of Abstention for Comment 16-34.
KAHN: See my Explanation of Abstention on Comment 16-34.

16-410 Log #3791 NEC-P16 **Final Action: Accept**
(800.50, 800.51, 800.53)

Note: See the Technical Correlating Committee Note on Comment 16-452.
Submitter: Marcelo M. Hirschler, GBH International / Rep. Fire Retardant Chemicals Association
Comment on Proposal No: 16-113
Recommendation: *Reject this proposal - Also reject the references to NFPA 90A in fine print notes and the creation of the new category of air duct cables and the subdivision of plenums. Revise the FPN to 800.51 as follows, and make no other changes.*

~~FPN: One method of defining low smoke-producing cables is by establishing an acceptable value of the smoke produced when tested in accordance with NFPA 262-1999, Standard Method of Test for Flame Travel and Smoke of Wires and Cables for Use in Air-Handling Spaces, to a maximum peak optical density of 0.5 and a maximum average optical density of 0.15. Similarly, one method of defining fire-resistant cables is by defining maximum allowable flame travel distance of 1.52 m (5 ft) when tested in accordance with the same test.~~

FPN: One method of defining a cable that is low smoke-producing cable and fire-resistant cable is that the cable exhibits a maximum peak optical density of 0.5 or less, an average optical density of 0.15 or less, and a maximum flame spread distance of 1.52 m (5 ft) or less when tested in accordance with NFPA 262, Standard Method of Test for Flame Travel and Smoke of Wires and Cables for Use in Air-Handling Spaces.
Substantiation: There is no need for a new category of CMD cables. There is also no justification for limiting the use of traditional plenum cables. It has become clear now that the expertise needed for choosing the type of wiring systems permitted in any space should be the prerogative of the NEC, which (through its various panels and its Technical Correlating Committee) has greater expertise and a broader view than the Technical Committee on Air Conditioning (responsible for NFPA 90A). Therefore, the NEC panels should continue making their own choices regarding wiring methods. The issue of correlation (or even reference) to either NFPA 90A or the categories of plenums used in NFPA 90A should be rejected by CMP 16.

Furthermore, the reference to NFPA 90A is not appropriate in the Fine Print Note, since NFPA 90A is not a suitable standard for testing or listing wiring methods. The logical way to have a fine print note is to reference the standard used for testing the fire safety of the materials, which in this case is a combination of NFPA 255 and NFPA 259, or the UL Subject 2424 that contains all the listing requirements.

See further information in the comment I made to recommend rejection of proposal 16-112.

Panel Meeting Action: Accept

Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:

"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."

This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.

Number Eligible to Vote: 15

Ballot Results: Affirmative: 13 Abstain: 2

Comment on Affirmative:

OHDE: See my Affirmative Comment for Comment 16-34.

Explanation of Abstention:

DORNA: See my Explanation of Abstention for Comment 16-34.

KAHN: See my Explanation of Abstention on Comment 16-34.

16-411 Log #3792 NEC-P16 **Final Action: Accept**
(800.50, 800.51, 800.53)

Note: See the Technical Correlating Committee Note on Comment 16-452.

Submitter: Marcelo M. Hirschler, GBH International / Rep. Fire Retardant Chemicals Association

Comment on Proposal No: 16-114

Recommendation: *Reject this proposal - Also reject the references to NFPA 90A in fine print notes and the creation of the new category of air duct cables and the subdivision of plenums. Revise the FPN to 800.51 as follows, and make no other changes.*

~~FPN: One method of defining low smoke-producing cables is by establishing an acceptable value of the smoke produced when tested in accordance with NFPA 262-1999, Standard Method of Test for Flame Travel and Smoke of Wires and Cables for Use in Air-Handling Spaces, to a maximum peak optical density of 0.5 and a maximum average optical density of 0.15. Similarly, one method of defining fire-resistant cables is by defining maximum allowable flame travel distance of 1.52 m (5 ft) when tested in accordance with the same test.~~

FPN: One method of defining a cable that is low smoke-producing cable and fire-resistant cable is that the cable exhibits a maximum peak optical density of 0.5 or less, an average optical density of 0.15 or less, and a maximum flame spread distance of 1.52 m (5 ft) or less when tested in accordance with NFPA 262, Standard Method of Test for Flame Travel and Smoke of Wires and Cables for Use in Air-Handling Spaces.

Substantiation: There is no need for a new category of CMD cables. There is also no justification for limiting the use of traditional plenum cables. It has become clear now that the expertise needed for choosing the type of wiring systems permitted in any space should be the prerogative of the NEC, which (through its various panels and its Technical Correlating Committee) has greater expertise and a broader view than the Technical Committee on Air Conditioning (responsible for NFPA 90A). Therefore, the NEC panels should continue making their own choices regarding wiring methods. The issue of correlation (or even reference) to either NFPA 90A or the categories of plenums used in NFPA 90A should be rejected by CMP 16.

Furthermore, the reference to NFPA 90A is not appropriate in the Fine Print Note, since NFPA 90A is not a suitable standard for testing or listing wiring methods. The logical way to have a fine print note is to reference the standard used for testing the fire safety of the materials, which in this case is a combination of NFPA 255 and NFPA 259, or the UL Subject 2424 that contains all the listing requirements.

See further information in the comment I made to recommend rejection of proposal 16-112.

Panel Meeting Action: Accept

Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:

"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."

This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.

Number Eligible to Vote: 15

Ballot Results: Affirmative: 13 Abstain: 2

Comment on Affirmative:

OHDE: See my Affirmative Comment for Comment 16-34.

Explanation of Abstention:

DORNA: See my Explanation of Abstention for Comment 16-34.

KAHN: See my Explanation of Abstention on Comment 16-34.

16-412 Log #3793 NEC-P16 **Final Action: Accept**
(800.50, 800.51, 800.53)

Note: See the Technical Correlating Committee Note on Comment 16-452.

Submitter: Marcelo M. Hirschler, GBH International / Rep. Fire Retardant Chemicals Association

Comment on Proposal No: 16-116

Recommendation: *Reject this proposal - Also reject the references to NFPA 90A in fine print notes and the creation of the new category of air duct cables and the subdivision of plenums. Revise the FPN to 800.51 as follows, and make no other changes.*

~~FPN: One method of defining low smoke-producing cables is by establishing an acceptable value of the smoke produced when tested in accordance with NFPA 262-1999, Standard Method of Test for Flame Travel and Smoke of Wires and Cables for Use in Air-Handling Spaces, to a maximum peak optical density of 0.5 and a maximum average optical density of 0.15. Similarly, one method of defining fire-resistant cables is by defining maximum allowable flame travel distance of 1.52 m (5 ft) when tested in accordance with the same test.~~

FPN: One method of defining a cable that is low smoke-producing cable and fire-resistant cable is that the cable exhibits a maximum peak optical density of 0.5 or less, an average optical density of 0.15 or less, and a maximum flame spread distance of 1.52 m (5 ft) or less when tested in accordance with NFPA 262, Standard Method of Test for Flame Travel and Smoke of Wires and Cables for Use in Air-Handling Spaces.

Substantiation: There is no need for a new category of CMD cables. There is also no justification for limiting the use of traditional plenum cables. It has become clear now that the expertise needed for choosing the type of wiring systems permitted in any space should be the prerogative of the NEC, which (through its various panels and its Technical Correlating Committee) has greater expertise and a broader view than the Technical Committee on Air Conditioning (responsible for NFPA 90A). Therefore, the NEC panels should continue making their own choices regarding wiring methods. The issue of correlation (or even reference) to either NFPA 90A or the categories of plenums used in NFPA 90A should be rejected by CMP 16.

Furthermore, the reference to NFPA 90A is not appropriate in the Fine Print Note, since NFPA 90A is not a suitable standard for testing or listing wiring methods. The logical way to have a fine print note is to reference the standard used for testing the fire safety of the materials, which in this case is a combination of NFPA 255 and NFPA 259, or the UL Subject 2424 that contains all the listing requirements.

See further information in the comment I made to recommend rejection of proposal 16-112.

Panel Meeting Action: Accept

Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:

"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."

This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.

Number Eligible to Vote: 15

Ballot Results: Affirmative: 13 Abstain: 2

Comment on Affirmative:

OHDE: See my Affirmative Comment for Comment 16-34.

Explanation of Abstention:

DORNA: See my Explanation of Abstention for Comment 16-34.

KAHN: See my Explanation of Abstention on Comment 16-34.

16-413 Log #3794 NEC-P16 **Final Action: Accept**
(800.50, 800.51, 800.53)

Note: See the Technical Correlating Committee Note on Comment 16-452.

Submitter: Marcelo M. Hirschler, GBH International / Rep. Fire Retardant Chemicals Association

Comment on Proposal No: 16-117

Recommendation: *Reject this proposal - Also reject the references to NFPA 90A in fine print notes and the creation of the new category of air duct cables and the subdivision of plenums. Revise the FPN to 800.51 as follows, and make no other changes.*

~~FPN: One method of defining low smoke-producing cables is by establishing an acceptable value of the smoke produced when tested in accordance with NFPA 262-1999, Standard Method of Test for Flame Travel and Smoke of Wires and Cables for Use in Air-Handling Spaces, to a maximum peak optical density of 0.5 and a maximum average optical density of 0.15. Similarly, one method of defining fire-resistant cables is by defining maximum allowable flame travel distance of 1.52 m (5 ft) when tested in accordance with the same test.~~

FPN: One method of defining a cable that is low smoke-producing cable and fire-resistant cable is that the cable exhibits a maximum peak optical density of 0.5 or less, an average optical density of 0.15 or less, and a maximum flame spread distance of 1.52 m (5 ft) or less when tested in accordance with NFPA 262, Standard Method of Test for Flame Travel and Smoke of Wires and Cables for Use in Air-Handling Spaces.

Substantiation: There is no need for a new category of CMD cables. There is also no justification for limiting the use of traditional plenum cables. It has become clear now that the expertise needed for choosing the type of wiring systems permitted in any space should be the prerogative of the NEC, which (through its various panels and its Technical Correlating Committee) has greater expertise and a broader view than the Technical Committee on Air Conditioning (responsible for NFPA 90A). Therefore, the NEC panels should continue making their own choices regarding wiring methods. The issue of correlation (or even reference) to either NFPA 90A or the categories of plenums used in NFPA 90A should be rejected by CMP 16.

Furthermore, the reference to NFPA 90A is not appropriate in the Fine Print Note, since NFPA 90A is not a suitable standard for testing or listing wiring methods. The logical way to have a fine print note is to reference the standard used for testing the fire safety of the materials, which in this case is a combination of NFPA 255 and NFPA 259, or the UL Subject 2424 that contains all the listing requirements.

See further information in the comment I made to recommend rejection of proposal 16-112.

Panel Meeting Action: Accept

Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:

"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."

This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.

Number Eligible to Vote: 15

Ballot Results: Affirmative: 13 Abstain: 2

Comment on Affirmative:

OHDE: See my Affirmative Comment for Comment 16-34.

Explanation of Abstention:

DORNA: See my Explanation of Abstention for Comment 16-34.

KAHN: See my Explanation of Abstention on Comment 16-34.

16-414 Log #3795 NEC-P16 **Final Action: Accept**
(800.50, 800.51, 800.53)

Note: See the Technical Correlating Committee Note on Comment 16-452.

Submitter: Marcelo M. Hirschler, GBH International / Rep. Fire Retardant Chemicals Association

Comment on Proposal No: 16-118

Recommendation: *Reject this proposal - Also reject the references to NFPA 90A in fine print notes and the creation of the new category of air duct cables and the subdivision of plenums. Revise the FPN to 800.51 as follows, and make no other changes.*

~~FPN: One method of defining low smoke-producing cables is by establishing an acceptable value of the smoke produced when tested in accordance with NFPA 262-1999, Standard Method of Test for Flame Travel and Smoke of Wires and Cables for Use in Air-Handling Spaces, to a maximum peak optical density of 0.5 and a maximum average optical density of 0.15. Similarly, one method of defining fire-resistant cables is by defining maximum allowable flame travel distance of 1.52 m (5 ft) when tested in accordance with the same test.~~

FPN: One method of defining a cable that is low smoke-producing cable and fire-resistant cable is that the cable exhibits a maximum peak optical density of 0.5 or less, an average optical density of 0.15 or less, and a maximum flame spread distance of 1.52 m (5 ft) or less when tested in accordance with NFPA 262, Standard Method of Test for Flame Travel and Smoke of Wires and Cables for Use in Air-Handling Spaces.

Substantiation: There is no need for a new category of CMD cables. There is also no justification for limiting the use of traditional plenum cables. It has become clear now that the expertise needed for choosing the type of wiring systems permitted in any space should be the prerogative of the NEC, which (through its various panels and its Technical Correlating Committee) has greater expertise and a broader view than the Technical Committee on Air Conditioning (responsible for NFPA 90A). Therefore, the NEC panels should continue making their own choices regarding wiring methods. The issue of correlation (or even reference) to either NFPA 90A or the categories of plenums used in NFPA 90A should be rejected by CMP 16.

Furthermore, the reference to NFPA 90A is not appropriate in the Fine Print Note, since NFPA 90A is not a suitable standard for testing or listing wiring methods. The logical way to have a fine print note is to reference the standard used for testing the fire safety of the materials, which in this case is a combination of NFPA 255 and NFPA 259, or the UL Subject 2424 that contains all the listing requirements.

See further information in the comment I made to recommend rejection of proposal 16-112.

Panel Meeting Action: Accept

Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:

"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."

This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.

Number Eligible to Vote: 15

Ballot Results: Affirmative: 13 Abstain: 2

Comment on Affirmative:

OHDE: See my Affirmative Comment for Comment 16-34.

Explanation of Abstention:

DORNA: See my Explanation of Abstention for Comment 16-34.

KAHN: See my Explanation of Abstention on Comment 16-34.

16-415 Log #3796 NEC-P16 **Final Action: Accept**
(800.50, 800.51, 800.53)

Note: See the Technical Correlating Committee Note on Comment 16-452.

Submitter: Marcelo M. Hirschler, GBH International / Rep. Fire Retardant Chemicals Association

Comment on Proposal No: 16-120

Recommendation: *Reject this proposal - Also reject the references to NFPA 90A in fine print notes and the creation of the new category of air duct cables and the subdivision of plenums. Revise the FPN to 800.51 as follows, and make no other changes.*

~~FPN: One method of defining low smoke-producing cables is by establishing an acceptable value of the smoke produced when tested in accordance with NFPA 262-1999, Standard Method of Test for Flame Travel and Smoke of Wires and Cables for Use in Air-Handling Spaces, to a maximum peak optical density of 0.5 and a maximum average optical density of 0.15. Similarly, one method of defining fire-resistant cables is by defining maximum allowable flame travel distance of 1.52 m (5 ft) when tested in accordance with the same test.~~

FPN: One method of defining a cable that is low smoke-producing cable and fire-resistant cable is that the cable exhibits a maximum peak optical density of 0.5 or less, an average optical density of 0.15 or less, and a maximum flame spread distance of 1.52 m (5 ft) or less when tested in accordance with NFPA 262, Standard Method of Test for Flame Travel and Smoke of Wires and Cables for Use in Air-Handling Spaces.

Substantiation: There is no need for a new category of CMD cables. There is also no justification for limiting the use of traditional plenum cables. It has become clear now that the expertise needed for choosing the type of wiring systems permitted in any space should be the prerogative of the NEC, which (through its various panels and its Technical Correlating Committee) has greater expertise and a broader view than the Technical Committee on Air Conditioning (responsible for NFPA 90A). Therefore, the NEC panels should

continue making their own choices regarding wiring methods. The issue of correlation (or even reference) to either NFPA 90A or the categories of plenums used in NFPA 90A should be rejected by CMP 16.

Furthermore, the reference to NFPA 90A is not appropriate in the Fine Print Note, since NFPA 90A is not a suitable standard for testing or listing wiring methods. The logical way to have a fine print note is to reference the standard used for testing the fire safety of the materials, which in this case is a combination of NFPA 255 and NFPA 259, or the UL Subject 2424 that contains all the listing requirements.

See further information in the comment I made to recommend rejection of proposal 16-112.

Panel Meeting Action: Accept

Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:

"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."

This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.

Number Eligible to Vote: 15

Ballot Results: Affirmative: 13 Abstain: 2

Comment on Affirmative:

OHDE: See my Affirmative Comment for Comment 16-34.

Explanation of Abstention:

DORNA: See my Explanation of Abstention for Comment 16-34.

KAHN: See my Explanation of Abstention on Comment 16-34.

16-416 Log #3797 NEC-P16 **Final Action: Accept**
(800.50, 800.51, 800.53)

Note: See the Technical Correlating Committee Note on Comment 16-452.

Submitter: Marcelo M. Hirschler, GBH International / Rep. Fire Retardant Chemicals Association

Comment on Proposal No: 16-121

Recommendation: *Reject this proposal - Also reject the references to NFPA 90A in fine print notes and the creation of the new category of air duct cables and the subdivision of plenums. Revise the FPN to 800.51 as follows, and make no other changes.*

~~FPN: One method of defining low smoke-producing cables is by establishing an acceptable value of the smoke produced when tested in accordance with NFPA 262-1999, Standard Method of Test for Flame Travel and Smoke of Wires and Cables for Use in Air-Handling Spaces, to a maximum peak optical density of 0.5 and a maximum average optical density of 0.15. Similarly, one method of defining fire-resistant cables is by defining maximum allowable flame travel distance of 1.52 m (5 ft) when tested in accordance with the same test.~~

FPN: One method of defining a cable that is low smoke-producing cable and fire-resistant cable is that the cable exhibits a maximum peak optical density of 0.5 or less, an average optical density of 0.15 or less, and a maximum flame spread distance of 1.52 m (5 ft) or less when tested in accordance with NFPA 262, Standard Method of Test for Flame Travel and Smoke of Wires and Cables for Use in Air-Handling Spaces.

Substantiation: There is no need for a new category of CMD cables. There is also no justification for limiting the use of traditional plenum cables. It has become clear now that the expertise needed for choosing the type of wiring systems permitted in any space should be the prerogative of the NEC, which (through its various panels and its Technical Correlating Committee) has greater expertise and a broader view than the Technical Committee on Air Conditioning (responsible for NFPA 90A). Therefore, the NEC panels should continue making their own choices regarding wiring methods. The issue of correlation (or even reference) to either NFPA 90A or the categories of plenums used in NFPA 90A should be rejected by CMP 16.

Furthermore, the reference to NFPA 90A is not appropriate in the Fine Print Note, since NFPA 90A is not a suitable standard for testing or listing wiring methods. The logical way to have a fine print note is to reference the standard used for testing the fire safety of the materials, which in this case is a combination of NFPA 255 and NFPA 259, or the UL Subject 2424 that contains all the listing requirements.

See further information in the comment I made to recommend rejection of proposal 16-112.

Panel Meeting Action: Accept

Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:

"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."

This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.

Number Eligible to Vote: 15

Ballot Results: Affirmative: 13 Abstain: 2

Comment on Affirmative:

OHDE: See my Affirmative Comment for Comment 16-34.

Explanation of Abstention:

DORNA: See my Explanation of Abstention for Comment 16-34.

KAHN: See my Explanation of Abstention on Comment 16-34.

16-417 Log #3798 NEC-P16 **Final Action: Accept**
(800.50, 800.51, 800.53)

Note: See the Technical Correlating Committee Note on Comment 16-452.

Submitter: Marcelo M. Hirschler, GBH International / Rep. Fire Retardant Chemicals Association

Comment on Proposal No: 16-122

Recommendation: *Reject this proposal - Also reject the references to NFPA 90A in fine print notes and the creation of the new category of air duct cables and the subdivision of plenums. Revise the FPN to 800.51 as follows, and make no other changes.*

~~FPN: One method of defining low smoke-producing cables is by establishing an acceptable value of the smoke produced when tested in accordance with NFPA 262-1999, Standard Method of Test for Flame Travel and Smoke of Wires and Cables for Use in Air-Handling Spaces, to a maximum peak optical density of 0.5 and a maximum average optical density of 0.15. Similarly, one method of defining fire-resistant cables is by defining maximum allowable flame travel distance of 1.52 m (5 ft) when tested in accordance with the same test.~~

FPN: One method of defining a cable that is low smoke-producing cable and fire-resistant cable is that the cable exhibits a maximum peak optical density of 0.5 or less, an average optical density of 0.15 or less, and a maximum flame spread distance of 1.52 m (5 ft) or less when tested in accordance with NFPA 262, Standard Method of Test for Flame Travel and Smoke of Wires and Cables for Use in Air-Handling Spaces.

Substantiation: There is no need for a new category of CMD cables. There is also no justification for limiting the use of traditional plenum cables. It has become clear now that the expertise needed for choosing the type of wiring systems permitted in any space should be the prerogative of the NEC, which (through its various panels and its Technical Correlating Committee) has greater expertise and a broader view than the Technical Committee on Air Conditioning (responsible for NFPA 90A). Therefore, the NEC panels should continue making their own choices regarding wiring methods. The issue of correlation (or even reference) to either NFPA 90A or the categories of plenums used in NFPA 90A should be rejected by CMP 16.

Furthermore, the reference to NFPA 90A is not appropriate in the Fine Print Note, since NFPA 90A is not a suitable standard for testing or listing wiring methods. The logical way to have a fine print note is to reference the standard used for testing the fire safety of the materials, which in this case is a combination of NFPA 255 and NFPA 259, or the UL Subject 2424 that contains all the listing requirements.

See further information in the comment I made to recommend rejection of proposal 16-112.

Panel Meeting Action: Accept

Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:

"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."

This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.

Number Eligible to Vote: 15

Ballot Results: Affirmative: 13 Abstain: 2

Comment on Affirmative:

OHDE: See my Affirmative Comment for Comment 16-34.

Explanation of Abstention:

DORNA: See my Explanation of Abstention for Comment 16-34.

KAHN: See my Explanation of Abstention on Comment 16-34.

16-418 Log #3799 NEC-P16 **Final Action: Accept**
(800.50, 800.51, 800.53)

Note: See the Technical Correlating Committee Note on Comment 16-452.

Submitter: Marcelo M. Hirschler, GBH International / Rep. Fire Retardant Chemicals Association

Comment on Proposal No: 16-123

Recommendation: *Reject this proposal - Also reject the references to NFPA 90A in fine print notes and the creation of the new category of air duct cables and the subdivision of plenums. Revise the FPN to 800.51 as follows, and make no other changes.*

~~FPN: One method of defining low smoke-producing cables is by establishing an acceptable value of the smoke produced when tested in accordance with NFPA 262-1999, Standard Method of Test for Flame Travel and Smoke of Wires and Cables for Use in Air-Handling Spaces, to a maximum peak optical density of 0.5 and a maximum average optical density of 0.15. Similarly, one method of defining fire-resistant cables is by defining maximum allowable flame travel distance of 1.52 m (5 ft) when tested in accordance with the same test.~~

FPN: One method of defining a cable that is low smoke-producing cable and fire-resistant cable is that the cable exhibits a maximum peak optical density of 0.5 or less, an average optical density of 0.15 or less, and a maximum flame spread distance of 1.52 m (5 ft) or less when tested in accordance with NFPA 262, Standard Method of Test for Flame Travel and Smoke of Wires and Cables for Use in Air-Handling Spaces.

Substantiation: There is no need for a new category of CMD cables. There is also no justification for limiting the use of traditional plenum cables. It has become clear now that the expertise needed for choosing the type of wiring systems permitted in any space should be the prerogative of the NEC, which (through its various panels and its Technical Correlating Committee) has greater expertise and a broader view than the Technical Committee on Air Conditioning (responsible for NFPA 90A). Therefore, the NEC panels should continue making their own choices regarding wiring methods. The issue of correlation (or even reference) to either NFPA 90A or the categories of plenums used in NFPA 90A should be rejected by CMP 16.

Furthermore, the reference to NFPA 90A is not appropriate in the Fine Print Note, since NFPA 90A is not a suitable standard for testing or listing wiring methods. The logical way to have a fine print note is to reference the standard used for testing the fire safety of the materials, which in this case is a combination of NFPA 255 and NFPA 259, or the UL Subject 2424 that contains all the listing requirements.

See further information in the comment I made to recommend rejection of proposal 16-112.

Panel Meeting Action: Accept

Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:

"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."

This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.

Number Eligible to Vote: 15

Ballot Results: Affirmative: 13 Abstain: 2

Comment on Affirmative:

OHDE: See my Affirmative Comment for Comment 16-34.

Explanation of Abstention:

DORNA: See my Explanation of Abstention for Comment 16-34.

KAHN: See my Explanation of Abstention on Comment 16-34.

16-419 Log #3800 NEC-P16 **Final Action: Accept**
(800.50, 800.51, 800.53)

Note: See the Technical Correlating Committee Note on Comment 16-452.

Submitter: Marcelo M. Hirschler, GBH International / Rep. Fire Retardant Chemicals Association

Comment on Proposal No: 16-124

Recommendation: *Reject this proposal - Also reject the references to NFPA 90A in fine print notes and the creation of the new category of air duct cables and the subdivision of plenums. Revise the FPN to 800.51 as follows, and make no other changes.*

~~FPN: One method of defining low smoke-producing cables is by establishing an acceptable value of the smoke produced when tested in accordance with NFPA 262-1999, Standard Method of Test for Flame Travel and Smoke of Wires and Cables for Use in Air-Handling Spaces, to a maximum peak optical density of 0.5 and a maximum average optical density of 0.15. Similarly, one method of defining fire-resistant cables is by defining maximum allowable flame travel distance of 1.52 m (5 ft) when tested in accordance with the same test.~~

FPN: One method of defining a cable that is low smoke-producing cable and fire-resistant cable is that the cable exhibits a maximum peak optical density of 0.5 or less, an average optical density of 0.15 or less, and a maximum flame spread distance of 1.52 m (5 ft) or less when tested in accordance with NFPA 262, Standard Method of Test for Flame Travel and Smoke of Wires and Cables for Use in Air-Handling Spaces.

Substantiation: There is no need for a new category of CMD cables. There is also no justification for limiting the use of traditional plenum cables. It has become clear now that the expertise needed for choosing the type of wiring systems permitted in any space should be the prerogative of the NEC, which (through its various panels and its Technical Correlating Committee) has greater expertise and a broader view than the Technical Committee on Air Conditioning (responsible for NFPA 90A). Therefore, the NEC panels should continue making their own choices regarding wiring methods. The issue of correlation (or even reference) to either NFPA 90A or the categories of plenums used in NFPA 90A should be rejected by CMP 16.

Furthermore, the reference to NFPA 90A is not appropriate in the Fine Print Note, since NFPA 90A is not a suitable standard for testing or listing wiring methods. The logical way to have a fine print note is to reference the standard used for testing the fire safety of the materials, which in this case is a combination of NFPA 255 and NFPA 259, or the UL Subject 2424 that contains all the listing requirements.

See further information in the comment I made to recommend rejection of proposal 16-112.

Panel Meeting Action: Accept

Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:

"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."

This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.

Number Eligible to Vote: 15

Ballot Results: Affirmative: 13 Abstain: 2

Comment on Affirmative:

OHDE: See my Affirmative Comment for Comment 16-34.

Explanation of Abstention:

DORNA: See my Explanation of Abstention for Comment 16-34.

KAHN: See my Explanation of Abstention on Comment 16-34.

16-420 Log #3823 NEC-P16 **Final Action: Accept**
(800.50, 800.51, 800.53)

Note: See the Technical Correlating Committee Note on Comment 16-452.

Submitter: Marcelo M. Hirschler, GBH International / Rep. Fire Retardant Chemicals Association

Comment on Proposal No: 16-119

Recommendation: *Reject this proposal - Also reject the references to NFPA 90A in fine print notes and the creation of the new category of air duct cables and the subdivision of plenums. Revise the FPN to 800.51 as follows, and make no other changes.*

~~FPN: One method of defining low smoke-producing cables is by establishing an acceptable value of the smoke produced when tested in accordance with NFPA 262-1999, Standard Method of Test for Flame Travel and Smoke of Wires and Cables for Use in Air-Handling Spaces, to a maximum peak optical density of 0.5 and a maximum average optical density of 0.15. Similarly, one method of defining fire-resistant cables is by defining maximum allowable flame travel distance of 1.52 m (5 ft) when tested in accordance with the same test.~~

FPN: One method of defining a cable that is low smoke-producing cable and fire-resistant cable is that the cable exhibits a maximum peak optical density of 0.5 or less, an average optical density of 0.15 or less, and a maximum flame spread distance of 1.52 m (5 ft) or less when tested in accordance with NFPA 262, Standard Method of Test for Flame Travel and Smoke of Wires and Cables for Use in Air-Handling Spaces.

Substantiation: There is no need for a new category of CMD cables. There is also no justification for limiting the use of traditional plenum cables. It has become clear now that the expertise needed for choosing the type of wiring systems permitted in any space should be the prerogative of the NEC, which (through its various panels and its Technical Correlating Committee) has greater expertise and a broader view than the Technical Committee on Air Conditioning (responsible for NFPA 90A). Therefore, the NEC panels should

continue making their own choices regarding wiring methods. The issue of correlation (or even reference) to either NFPA 90A or the categories of plenums used in NFPA 90A should be rejected by CMP 16.

Furthermore, the reference to NFPA 90A is not appropriate in the Fine Print Note, since NFPA 90A is not a suitable standard for testing or listing wiring methods. The logical way to have a fine print note is to reference the standard used for testing the fire safety of the materials, which in this case is a combination of NFPA 255 and NFPA 259, or the UL Subject 2424 that contains all the listing requirements.

See further information in the comment I made to recommend rejection of proposal 16-112.

Panel Meeting Action: Accept

Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:

"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."

This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.

Number Eligible to Vote: 15

Ballot Results: Affirmative: 13 Abstain: 2

Comment on Affirmative:

OHDE: See my Affirmative Comment for Comment 16-34.

Explanation of Abstention:

DORNA: See my Explanation of Abstention for Comment 16-34.

KAHN: See my Explanation of Abstention on Comment 16-34.

16-421 Log #3901 NEC-P16 **Final Action: Accept**
(800.50, 800.51 & 800.53)

Note: See the Technical Correlating Committee Note on Comment 16-452.

Submitter: Herbert V. Congdon, II, CC2

Comment on Proposal No: 16-112

Recommendation: Delete listing requirements for "duct cable". Modify to read "Cables shall not be directly placed in air ducts."

Substantiation: • Duct cable is not non-combustible, rather is a fuel source. Placing this cable directly in the duct is unsafe to the occupants of the building and fire rescue personnel that may be dispatch to the incident. Rather than place this added fuel into a duct, the cable should be placed in non-combustible conduit and routed to the device within the duct.

• The installation of cable within an air duct, depending upon the velocity of the air, will cause noise in the workeplace environment.

• Air ducts will not be able to be cleaned without damaging cables placed within the air duct.

• Air flow, per code, is difficult to achieve in many buildings. The addition of any cable will deter what can be delivered. There are no proposals that limit the amount of these cables that can occupy an air duct.

• Cables in air ducts are subject to damage by installers that use sheet metal screws when maintaining air ducts. These screws are very sharp and will penetrate the sheath causing an electrical arc and possible fire from dust accumulation in air duct.

• Air distribution is specified in 4.3 of NFPA 90A and includes 4.3.10 for plenums. These plenums include ceiling cavity plenums (4.3.10.2), duct distribution plenum (4.3.10.3), apparatus casing plenum (4.3.10.4), air handling unit room plenum (4.3.10.5), and raised floor plenum (4.3.10.6). While requirements are specified for cable placed in ceiling cavity plenums and raised floor plenums (non-combustible or limited combustible with smoke requirements per NFPA 262), there are no like requirements for duct distribution plenum, or apparatus casing plenum, or air handling unit room plenum - rather they specify NFPA 255 for testing building materials. As for other areas specified in 4.3, Air Distribution, there are no requirements for cable placement in the air distribution system. As for other areas specified in 4.3, Air Distribution, there are no requirements for cable placement in the air distribution system. Following back to 4.1, General Requirements for Equipment, paragraph 4.1.4 specifies, "electrical wiring and equipment shall be installed in accordance to NFPA 70, national Electrical Code". Seems like NFPA 90A realizes that NFPA 70 is sufficient for their need.

• The NFPA 90A scope is specified for buildings that are 25,000 cublic feet or 3 stories in height. The NEC does not have this restriction. Harmonizing the code to this standard is inappropriate.

Panel Meeting Action: Accept

Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:

"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."

This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.

Number Eligible to Vote: 15

Ballot Results: Affirmative: 13 Abstain: 2

Comment on Affirmative:

OHDE: See my Affirmative Comment for Comment 16-34.

Explanation of Abstention:

DORNA: See my Explanation of Abstention for Comment 16-34.

KAHN: See my Explanation of Abstention on Comment 16-34.

16-422 Log #2266 NEC-P16 **Final Action: Accept**
(800.50, 800.51 and 800.53)

Note: See the Technical Correlating Committee Note on Comment 16-452.

Submitter: Frank Bisbee, Communication Planning Corporation

Comment on Proposal No: 16-127

Recommendation: Reject this proposal.

Substantiation: In recognizing the use of "duct cable" or "limited combustible cable," the proposal fails to consider toxicity of the newly specified product and the relative incapacitation factor presented by the chemical constituents of the polymer in new cable design. A recent study by the NFPA Fire Protection Research Foundation has advanced an international effort to make certain that people can escape a burning building before being incapacitated (overcome by smoke or gases generated by thermal decomposition). The work is part of a revolution in fire safety in which codes and standards are beginning to address how much smoke, or gases generated by thermal decomposition, will incapacitate people, rather than how much will kill them.

The jacketing and insulating materials used in duct cable and limited combustible cable are subject to heat decomposition and the emission of sub-lethal toxic fumes. Some of these fumes can incapacitate (blinding and choking) the building occupants. The requirements for using "duct cable" have failed to recognize toxicity or emissions that are essentially colorless (i.e. hydrogen fluoride, which converts to hydrofluoric acid upon contact with any moisture, and other toxic gases may be generated).

In 2002, the ISO (International Organization for Standardization), a network of the industrial-standards institutes of 147 countries, put forth a new standard calling for attention to the "sub-lethal" effects of smoke - when the heat, the thickness of smoke, and the toxic gases in smoke will block vision, make a person choke or tear up, or render a person unconscious. Because of this new ISO standard, these effects of smoke are supposed to be taken into account when regulating the size and placement of exits and the types of materials allowed in buildings. But to meet the standard, one needs to know more about the smoke produced by burning various materials. Working with the National Institute of Standards and Technology, the FPRF is laying the scientific groundwork needed to put the new standard into practice. The foundation recently completed the project's second phase of its International study of the Sub-lethal Effects of Fire Smoke on Survivability and Health. In the most recent phase of the study, the foundation's researchers performed three tests: They burned a sofa made of upholstered cushions on a steel frame, some particle board bookcases, and some household cable. In each case, the materials were burned in a room with a long adjacent corridor. The researchers measured the toxic gases emitted by each item, and how quickly the gases filled the room and moved down the corridor. They determined when and where in the room and in the hallway people would have to stop because of the smoke or the heat. Fire-test laboratories and manufacturers are expected to use this data to develop smaller-scale tests that can be done in a laboratory, so they won't need to set a room on fire every time they test a product. FPRF is uniquely equipped to conduct such studies, and NFPA officials expect more lives to be saved because of the new fire-safety standards that will emerge from this work.

By allowing and specifying the use of "duct cable," this proposal supports the use of materials counter to the findings already available in the public domain regarding sub-lethal toxicity of hydrogen fluoride and through the NFPA Fire Protection Research Foundation regarding incapacitation factors. Polymers used in duct cable and other limited combustible cable materials far exceed the incapacitation factor of other materials used in various cable construction both in generation of sub-lethal constituents and in hypertoxicity.

Panel Meeting Action: Accept

Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:

"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."

This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.

Number Eligible to Vote: 15
Ballot Results: Affirmative: 13 Abstain: 2
Comment on Affirmative:
OHDE: See my Affirmative Comment for Comment 16-34.
Explanation of Abstention:
DORNA: See my Explanation of Abstention for Comment 16-34.
KAHN: See my Explanation of Abstention on Comment 16-34.

16-423 Log #2307 NEC-P16 **Final Action: Accept**
(800.50, 800.51 and 800.53)

Note: See the Technical Correlating Committee Note on Comment 16-452.
Submitter: Frank Bisbee, Communication Planning Corporation
Comment on Proposal No: 16-116
Recommendation: Reject this proposal.
Substantiation: In recognizing the use of "duct cable" or "limited combustible cable," the proposal fails to consider toxicity of the newly specified product and the relative incapacitation factor presented by the chemical constituents of the polymer in new cable design. A recent study by the NFPA Fire Protection Research Foundation has advanced an international effort to make certain that people can escape a burning building before being incapacitated (overcome by smoke or gases generated by thermal decomposition). The work is part of a revolution in fire safety in which codes and standards are beginning to address how much smoke, or gases generated by thermal decomposition, will incapacitate people, rather than how much will kill them.

The jacketing and insulating materials used in duct cable and limited combustible cable are subject to heat decomposition and the emission of sub-lethal toxic fumes. Some of these fumes can incapacitate (blinding and choking) the building occupants. The requirements for using "duct cable" have failed to recognize toxicity or emissions that are essentially colorless (i.e. hydrogen fluoride, which converts to hydrofluoric acid upon contact with any moisture, and other toxic gases may be generated).

In 2002, the ISO (International Organization for Standardization), a network of the industrial-standards institutes of 147 countries, put forth a new standard calling for attention to the "sub-lethal" effects of smoke - when the heat, the thickness of smoke, and the toxic gases in smoke will block vision, make a person choke or tear up, or render a person unconscious. Because of this new ISO standard, these effects of smoke are supposed to be taken into account when regulating the size and placement of exits and the types of materials allowed in buildings. But to meet the standard, one needs to know more about the smoke produced by burning various materials. Working with the National Institute of Standards and Technology, the FPRF is laying the scientific groundwork needed to put the new standard into practice. The foundation recently completed the project's second phase of its International study of the Sub-lethal Effects of Fire Smoke on Survivability and Health. In the most recent phase of the study, the foundation's researchers performed three tests: They burned a sofa made of upholstered cushions on a steel frame, some particle board bookcases, and some household cable. In each case, the materials were burned in a room with a long adjacent corridor. The researchers measured the toxic gases emitted by each item, and how quickly the gases filled the room and moved down the corridor. They determined when and where in the room and in the hallway people would have to stop because of the smoke or the heat. Fire-test laboratories and manufacturers are expected to use this data to develop smaller-scale tests that can be done in a laboratory, so they won't need to set a room on fire every time they test a product. FPRF is uniquely equipped to conduct such studies, and NFPA officials expect more lives to be saved because of the new fire-safety standards that will emerge from this work.

By allowing and specifying the use of "duct cable," this proposal supports the use of materials counter to the findings already available in the public domain regarding sub-lethal toxicity of hydrogen fluoride and through the NFPA Fire Protection Research Foundation regarding incapacitation factors. Polymers used in duct cable and other limited combustible cable materials far exceed the incapacitation factor of other materials used in various cable construction both in generation of sub-lethal constituents and in hypertoxicity.
Panel Meeting Action: Accept
Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:

"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."

This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.

Number Eligible to Vote: 15
Ballot Results: Affirmative: 13 Abstain: 2
Comment on Affirmative:
OHDE: See my Affirmative Comment for Comment 16-34.
Explanation of Abstention:
DORNA: See my Explanation of Abstention for Comment 16-34.
KAHN: See my Explanation of Abstention on Comment 16-34.

16-424 Log #2311 NEC-P16 **Final Action: Accept**
(800.50, 800.51 and 800.53)

Note: See the Technical Correlating Committee Note on Comment 16-452.
Submitter: Frank Bisbee, Communication Planning Corporation
Comment on Proposal No: 16-114
Recommendation: Reject this proposal.
Substantiation: In recognizing the use of "duct cable" or "limited combustible cable," the proposal fails to consider toxicity of the newly specified product and the relative incapacitation factor presented by the chemical constituents of the polymer in new cable design. A recent study by the NFPA Fire Protection Research Foundation has advanced an international effort to make certain that people can escape a burning building before being incapacitated (overcome by smoke or gases generated by thermal decomposition). The work is part of a revolution in fire safety in which codes and standards are beginning to address how much smoke, or gases generated by thermal decomposition, will incapacitate people, rather than how much will kill them.

The jacketing and insulating materials used in duct cable and limited combustible cable are subject to heat decomposition and the emission of sub-lethal toxic fumes. Some of these fumes can incapacitate (blinding and choking) the building occupants. The requirements for using "duct cable" have failed to recognize toxicity or emissions that are essentially colorless (i.e. hydrogen fluoride, which converts to hydrofluoric acid upon contact with any moisture, and other toxic gases may be generated).

In 2002, the ISO (International Organization for Standardization), a network of the industrial-standards institutes of 147 countries, put forth a new standard calling for attention to the "sub-lethal" effects of smoke - when the heat, the thickness of smoke, and the toxic gases in smoke will block vision, make a person choke or tear up, or render a person unconscious. Because of this new ISO standard, these effects of smoke are supposed to be taken into account when regulating the size and placement of exits and the types of materials allowed in buildings. But to meet the standard, one needs to know more about the smoke produced by burning various materials. Working with the National Institute of Standards and Technology, the FPRF is laying the scientific groundwork needed to put the new standard into practice. The foundation recently completed the project's second phase of its International study of the Sub-lethal Effects of Fire Smoke on Survivability and Health. In the most recent phase of the study, the foundation's researchers performed three tests: They burned a sofa made of upholstered cushions on a steel frame, some particle board bookcases, and some household cable. In each case, the materials were burned in a room with a long adjacent corridor. The researchers measured the toxic gases emitted by each item, and how quickly the gases filled the room and moved down the corridor. They determined when and where in the room and in the hallway people would have to stop because of the smoke or the heat. Fire-test laboratories and manufacturers are expected to use this data to develop smaller-scale tests that can be done in a laboratory, so they won't need to set a room on fire every time they test a product. FPRF is uniquely equipped to conduct such studies, and NFPA officials expect more lives to be saved because of the new fire-safety standards that will emerge from this work.

By allowing and specifying the use of "duct cable," this proposal supports the use of materials counter to the findings already available in the public domain regarding sub-lethal toxicity of hydrogen fluoride and through the NFPA Fire Protection Research Foundation regarding incapacitation factors. Polymers used in duct cable and other limited combustible cable materials far exceed the incapacitation factor of other materials used in various cable construction both in generation of sub-lethal constituents and in hypertoxicity.
Panel Meeting Action: Accept

Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:

"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."

This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.

Number Eligible to Vote: 15
Ballot Results: Affirmative: 13 Abstain: 2
Comment on Affirmative:
OHDE: See my Affirmative Comment for Comment 16-34.
Explanation of Abstention:
DORNA: See my Explanation of Abstention for Comment 16-34.
KAHN: See my Explanation of Abstention on Comment 16-34.

16-425 Log #2314 NEC-P16 **Final Action: Accept**
(800.50, 800.51 and 800.53)

Note: See the Technical Correlating Committee Note on Comment 16-452.
Submitter: Frank Bisbee, Communication Planning Corporation
Comment on Proposal No: 16-117
Recommendation: Reject this proposal.
Substantiation: In recognizing the use of "duct cable" or "limited combustible cable," the proposal fails to consider toxicity of the newly specified product and the relative incapacitation factor presented by the chemical constituents of the polymer in new cable design. A recent study by the NFPA Fire Protection Research Foundation has advanced an international effort to make certain that people can escape a burning building before being incapacitated (overcome by smoke or gases generated by thermal decomposition). The work is part of a revolution in fire safety in which codes and standards are beginning to address how much smoke, or gases generated by thermal decomposition, will incapacitate people, rather than how much will kill them.

The jacketing and insulating materials used in duct cable and limited combustible cable are subject to heat decomposition and the emission of sub-lethal toxic fumes. Some of these fumes can incapacitate (blinding and choking) the building occupants. The requirements for using "duct cable" have failed to recognize toxicity or emissions that are essentially colorless (i.e. hydrogen fluoride, which converts to hydrofluoric acid upon contact with any moisture, and other toxic gases may be generated).

In 2002, the ISO (International Organization for Standardization), a network of the industrial-standards institutes of 147 countries, put forth a new standard calling for attention to the "sub-lethal" effects of smoke - when the heat, the thickness of smoke, and the toxic gases in smoke will block vision, make a person choke or tear up, or render a person unconscious. Because of this new ISO standard, these effects of smoke are supposed to be taken into account when regulating the size and placement of exits and the types of materials allowed in buildings. But to meet the standard, one needs to know more about the smoke produced by burning various materials. Working with the National Institute of Standards and Technology, the FPRF is laying the scientific groundwork needed to put the new standard into practice. The foundation recently completed the project's second phase of its International study of the Sub-lethal Effects of Fire Smoke on Survivability and Health. In the most recent phase of the study, the foundation's researchers performed three tests: They burned a sofa made of upholstered cushions on a steel frame, some particle board bookcases, and some household cable. In each case, the materials were burned in a room with a long adjacent corridor. The researchers measured the toxic gases emitted by each item, and how quickly the gases filled the room and moved down the corridor. They determined when and where in the room and in the hallway people would have to stop because of the smoke or the heat. Fire-test laboratories and manufacturers are expected to use this data to develop smaller-scale tests that can be done in a laboratory, so they won't need to set a room on fire every time they test a product. FPRF is uniquely equipped to conduct such studies, and NFPA officials expect more lives to be saved because of the new fire-safety standards that will emerge from this work.

By allowing and specifying the use of "duct cable," this proposal supports the use of materials counter to the findings already available in the public domain regarding sub-lethal toxicity of hydrogen fluoride and through the NFPA Fire Protection Research Foundation regarding incapacitation factors. Polymers used in duct cable and other limited combustible cable materials far exceed the incapacitation factor of other materials used in various cable construction both in generation of sub-lethal constituents and in hypertoxicity.
Panel Meeting Action: Accept
Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:

"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."

This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.

Number Eligible to Vote: 15
Ballot Results: Affirmative: 13 Abstain: 2
Comment on Affirmative:
OHDE: See my Affirmative Comment for Comment 16-34.
Explanation of Abstention:
DORNA: See my Explanation of Abstention for Comment 16-34.
KAHN: See my Explanation of Abstention on Comment 16-34.

16-426 Log #2315 NEC-P16 **Final Action: Accept**
(800.50, 800.51 and 800.53)

Note: See the Technical Correlating Committee Note on Comment 16-452.
Submitter: Frank Bisbee, Communication Planning Corporation
Comment on Proposal No: 16-111
Recommendation: Reject this proposal.
Substantiation: In recognizing the use of "duct cable" or "limited combustible cable," the proposal fails to consider toxicity of the newly specified product and the relative incapacitation factor presented by the chemical constituents of the polymer in new cable design. A recent study by the NFPA Fire Protection Research Foundation has advanced an international effort to make certain that people can escape a burning building before being incapacitated (overcome by smoke or gases generated by thermal decomposition). The work is part of a revolution in fire safety in which codes and standards are beginning to address how much smoke, or gases generated by thermal decomposition, will incapacitate people, rather than how much will kill them.

The jacketing and insulating materials used in duct cable and limited combustible cable are subject to heat decomposition and the emission of sub-lethal toxic fumes. Some of these fumes can incapacitate (blinding and choking) the building occupants. The requirements for using "duct cable" have failed to recognize toxicity or emissions that are essentially colorless (i.e. hydrogen fluoride, which converts to hydrofluoric acid upon contact with any moisture, and other toxic gases may be generated).

In 2002, the ISO (International Organization for Standardization), a network of the industrial-standards institutes of 147 countries, put forth a new standard calling for attention to the "sub-lethal" effects of smoke - when the heat, the thickness of smoke, and the toxic gases in smoke will block vision, make a person choke or tear up, or render a person unconscious. Because of this new ISO standard, these effects of smoke are supposed to be taken into account when regulating the size and placement of exits and the types of materials allowed in buildings. But to meet the standard, one needs to know more about the smoke produced by burning various materials. Working with the National Institute of Standards and Technology, the FPRF is laying the scientific groundwork needed to put the new standard into practice. The foundation recently completed the project's second phase of its International study of the Sub-lethal Effects of Fire Smoke on Survivability and Health. In the most recent phase of the study, the foundation's researchers performed three tests: They burned a sofa made of upholstered cushions on a steel frame, some particle board bookcases, and some household cable. In each case, the materials were burned in a room with a long adjacent corridor. The researchers measured the toxic gases emitted by each item, and how quickly the gases filled the room and moved down the corridor. They determined when and where in the room and in the hallway people would have to stop because of the smoke or the heat. Fire-test laboratories and manufacturers are expected to use this data to develop smaller-scale tests that can be done in a laboratory, so they won't need to set a room on fire every time they test a product. FPRF is uniquely equipped to conduct such studies, and NFPA officials expect more lives to be saved because of the new fire-safety standards that will emerge from this work.

By allowing and specifying the use of "duct cable," this proposal supports the use of materials counter to the findings already available in the public domain regarding sub-lethal toxicity of hydrogen fluoride and through the NFPA Fire Protection Research Foundation regarding incapacitation factors. Polymers used in duct cable and other limited combustible cable materials far exceed the incapacitation factor of other materials used in various cable construction both in generation of sub-lethal constituents and in hypertoxicity.
Panel Meeting Action: Accept
Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr.

Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:

"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."

This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.

Number Eligible to Vote: 15
Ballot Results: Affirmative: 13 Abstain: 2
Comment on Affirmative:
OHDE: See my Affirmative Comment for Comment 16-34.
Explanation of Abstention:
DORNA: See my Explanation of Abstention for Comment 16-34.
KAHN: See my Explanation of Abstention on Comment 16-34.

16-427 Log #2316 NEC-P16 **Final Action: Accept**
(800.50, 800.51 and 800.53)

Note: See the Technical Correlating Committee Note on Comment 16-452.
Submitter: Frank Bisbee, Communication Planning Corporation
Comment on Proposal No: 16-113
Recommendation: Reject this proposal.
Substantiation: In recognizing the use of "duct cable" or "limited combustible cable," the proposal fails to consider toxicity of the newly specified product and the relative incapacitation factor presented by the chemical constituents of the polymer in new cable design. A recent study by the NFPA Fire Protection Research Foundation has advanced an international effort to make certain that people can escape a burning building before being incapacitated (overcome by smoke or gases generated by thermal decomposition). The work is part of a revolution in fire safety in which codes and standards are beginning to address how much smoke, or gases generated by thermal decomposition, will incapacitate people, rather than how much will kill them.

The jacketing and insulating materials used in duct cable and limited combustible cable are subject to heat decomposition and the emission of sub-lethal toxic fumes. Some of these fumes can incapacitate (blinding and choking) the building occupants. The requirements for using "duct cable" have failed to recognize toxicity or emissions that are essentially colorless (i.e. hydrogen fluoride, which converts to hydrofluoric acid upon contact with any moisture, and other toxic gases may be generated).

In 2002, the ISO (International Organization for Standardization), a network of the industrial-standards institutes of 147 countries, put forth a new standard calling for attention to the "sub-lethal" effects of smoke - when the heat, the thickness of smoke, and the toxic gases in smoke will block vision, make a person choke or tear up, or render a person unconscious. Because of this new ISO standard, these effects of smoke are supposed to be taken into account when regulating the size and placement of exits and the types of materials allowed in buildings. But to meet the standard, one needs to know more about the smoke produced by burning various materials. Working with the National Institute of Standards and Technology, the FPRF is laying the scientific groundwork needed to put the new standard into practice. The foundation recently completed the project's second phase of its International study of the Sub-lethal Effects of Fire Smoke on Survivability and Health. In the most recent phase of the study, the foundation's researchers performed three tests: They burned a sofa made of upholstered cushions on a steel frame, some particle board bookcases, and some household cable. In each case, the materials were burned in a room with a long adjacent corridor. The researchers measured the toxic gases emitted by each item, and how quickly the gases filled the room and moved down the corridor. They determined when and where in the room and in the hallway people would have to stop because of the smoke or the heat. Fire-test laboratories and manufacturers are expected to use this data to develop smaller-scale tests that can be done in a laboratory, so they won't need to set a room on fire every time they test a product. FPRF is uniquely equipped to conduct such studies, and NFPA officials expect more lives to be saved because of the new fire-safety standards that will emerge from this work.

By allowing and specifying the use of "duct cable," this proposal supports the use of materials counter to the findings already available in the public domain regarding sub-lethal toxicity of hydrogen fluoride and through the NFPA Fire Protection Research Foundation regarding incapacitation factors. Polymers used in duct cable and other limited combustible cable materials far exceed the incapacitation factor of other materials used in various cable construction both in generation of sub-lethal constituents and in hypertoxicity.
Panel Meeting Action: Accept
Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:

"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."

This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.

Number Eligible to Vote: 15
Ballot Results: Affirmative: 13 Abstain: 2
Comment on Affirmative:
OHDE: See my Affirmative Comment for Comment 16-34.
Explanation of Abstention:
DORNA: See my Explanation of Abstention for Comment 16-34.
KAHN: See my Explanation of Abstention on Comment 16-34.

16-428 Log #2318 NEC-P16 **Final Action: Accept**
(800.50, 800.51 and 800.53)

Submitter: Frank Bisbee, Communication Planning Corporation
Comment on Proposal No: 16-110
Recommendation: Reject this proposal.
Substantiation: In recognizing the use of "duct cable" or "limited combustible cable," the proposal fails to consider toxicity of the newly specified product and the relative incapacitation factor presented by the chemical constituents of the polymer in new cable design. A recent study by the NFPA Fire Protection Research Foundation has advanced an international effort to make certain that people can escape a burning building before being incapacitated (overcome by smoke or gases generated by thermal decomposition). The work is part of a revolution in fire safety in which codes and standards are beginning to address how much smoke, or gases generated by thermal decomposition, will incapacitate people, rather than how much will kill them.

The jacketing and insulating materials used in duct cable and limited combustible cable are subject to heat decomposition and the emission of sub-lethal toxic fumes. Some of these fumes can incapacitate (blinding and choking) the building occupants. The requirements for using "duct cable" have failed to recognize toxicity or emissions that are essentially colorless (i.e. hydrogen fluoride, which converts to hydrofluoric acid upon contact with any moisture, and other toxic gases may be generated).

In 2002, the ISO (International Organization for Standardization), a network of the industrial-standards institutes of 147 countries, put forth a new standard calling for attention to the "sub-lethal" effects of smoke - when the heat, the thickness of smoke, and the toxic gases in smoke will block vision, make a person choke or tear up, or render a person unconscious. Because of this new ISO standard, these effects of smoke are supposed to be taken into account when regulating the size and placement of exits and the types of materials allowed in buildings. But to meet the standard, one needs to know more about the smoke produced by burning various materials. Working with the National Institute of Standards and Technology, the FPRF is laying the scientific groundwork needed to put the new standard into practice. The foundation recently completed the project's second phase of its International study of the Sub-lethal Effects of Fire Smoke on Survivability and Health. In the most recent phase of the study, the foundation's researchers performed three tests: They burned a sofa made of upholstered cushions on a steel frame, some particle board bookcases, and some household cable. In each case, the materials were burned in a room with a long adjacent corridor. The researchers measured the toxic gases emitted by each item, and how quickly the gases filled the room and moved down the corridor. They determined when and where in the room and in the hallway people would have to stop because of the smoke or the heat. Fire-test laboratories and manufacturers are expected to use this data to develop smaller-scale tests that can be done in a laboratory, so they won't need to set a room on fire every time they test a product. FPRF is uniquely equipped to conduct such studies, and NFPA officials expect more lives to be saved because of the new fire-safety standards that will emerge from this work.

By allowing and specifying the use of "duct cable," this proposal supports the use of materials counter to the findings already available in the public domain regarding sub-lethal toxicity of hydrogen fluoride and through the NFPA Fire Protection Research Foundation regarding incapacitation factors. Polymers used in duct cable and other limited combustible cable materials far exceed the incapacitation factor of other materials used in various cable construction both in generation of sub-lethal constituents and in hypertoxicity.
Panel Meeting Action: Accept

Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:

"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."

This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.

Number Eligible to Vote: 15
Ballot Results: Affirmative: 13 Abstain: 2
Comment on Affirmative:
OHDE: See my Affirmative Comment for Comment 16-34.
Explanation of Abstention:
DORNA: See my Explanation of Abstention for Comment 16-34.
KAHN: See my Explanation of Abstention on Comment 16-34.

16-429 Log #2324 NEC-P16 **Final Action: Accept**
(800.50, 800.51 and 800.53)

Note: See the Technical Correlating Committee Note on Comment 16-452.
Submitter: Frank Bisbee, Communication Planning Corporation
Comment on Proposal No: 16-120
Recommendation: Reject this proposal.
Substantiation: In recognizing the use of "duct cable" or "limited combustible cable," the proposal fails to consider toxicity of the newly specified product and the relative incapacitation factor presented by the chemical constituents of the polymer in new cable design. A recent study by the NFPA Fire Protection Research Foundation has advanced an international effort to make certain that people can escape a burning building before being incapacitated (overcome by smoke or gases generated by thermal decomposition). The work is part of a revolution in fire safety in which codes and standards are beginning to address how much smoke, or gases generated by thermal decomposition, will incapacitate people, rather than how much will kill them.

The jacketing and insulating materials used in duct cable and limited combustible cable are subject to heat decomposition and the emission of sub-lethal toxic fumes. Some of these fumes can incapacitate (blinding and choking) the building occupants. The requirements for using "duct cable" have failed to recognize toxicity or emissions that are essentially colorless (i.e. hydrogen fluoride, which converts to hydrofluoric acid upon contact with any moisture, and other toxic gases may be generated).

In 2002, the ISO (International Organization for Standardization), a network of the industrial-standards institutes of 147 countries, put forth a new standard calling for attention to the "sub-lethal" effects of smoke - when the heat, the thickness of smoke, and the toxic gases in smoke will block vision, make a person choke or tear up, or render a person unconscious. Because of this new ISO standard, these effects of smoke are supposed to be taken into account when regulating the size and placement of exits and the types of materials allowed in buildings. But to meet the standard, one needs to know more about the smoke produced by burning various materials. Working with the National Institute of Standards and Technology, the FPRF is laying the scientific groundwork needed to put the new standard into practice. The foundation recently completed the project's second phase of its International study of the Sub-lethal Effects of Fire Smoke on Survivability and Health. In the most recent phase of the study, the foundation's researchers performed three tests: They burned a sofa made of upholstered cushions on a steel frame, some particle board bookcases, and some household cable. In each case, the materials were burned in a room with a long adjacent corridor. The researchers measured the toxic gases emitted by each item, and how quickly the gases filled the room and moved down the corridor. They determined when and where in the room and in the hallway people would have to stop because of the smoke or the heat. Fire-test laboratories and manufacturers are expected to use this data to develop smaller-scale tests that can be done in a laboratory, so they won't need to set a room on fire every time they test a product. FPRF is uniquely equipped to conduct such studies, and NFPA officials expect more lives to be saved because of the new fire-safety standards that will emerge from this work.

By allowing and specifying the use of "duct cable," this proposal supports the use of materials counter to the findings already available in the public domain regarding sub-lethal toxicity of hydrogen fluoride and through the NFPA Fire Protection Research Foundation regarding incapacitation factors. Polymers used in duct cable and other limited combustible cable materials far exceed the incapacitation factor of other materials used in various cable construction both in generation of sub-lethal constituents and in hypertoxicity.
Panel Meeting Action: Accept
Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:

"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."

This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.

Number Eligible to Vote: 15
Ballot Results: Affirmative: 13 Abstain: 2
Comment on Affirmative:
OHDE: See my Affirmative Comment for Comment 16-34.
Explanation of Abstention:
DORNA: See my Explanation of Abstention for Comment 16-34.
KAHN: See my Explanation of Abstention on Comment 16-34.

16-430 Log #2325 NEC-P16 **Final Action: Accept**
(800.50, 800.51 and 800.53)

Note: See the Technical Correlating Committee Note on Comment 16-452.
Submitter: Frank Bisbee, Communication Planning Corporation
Comment on Proposal No: 16-118
Recommendation: Reject this proposal.
Substantiation: In recognizing the use of "duct cable" or "limited combustible cable," the proposal fails to consider toxicity of the newly specified product and the relative incapacitation factor presented by the chemical constituents of the polymer in new cable design. A recent study by the NFPA Fire Protection Research Foundation has advanced an international effort to make certain that people can escape a burning building before being incapacitated (overcome by smoke or gases generated by thermal decomposition). The work is part of a revolution in fire safety in which codes and standards are beginning to address how much smoke, or gases generated by thermal decomposition, will incapacitate people, rather than how much will kill them.

The jacketing and insulating materials used in duct cable and limited combustible cable are subject to heat decomposition and the emission of sub-lethal toxic fumes. Some of these fumes can incapacitate (blinding and choking) the building occupants. The requirements for using "duct cable" have failed to recognize toxicity or emissions that are essentially colorless (i.e. hydrogen fluoride, which converts to hydrofluoric acid upon contact with any moisture, and other toxic gases may be generated).

In 2002, the ISO (International Organization for Standardization), a network of the industrial-standards institutes of 147 countries, put forth a new standard calling for attention to the "sub-lethal" effects of smoke - when the heat, the thickness of smoke, and the toxic gases in smoke will block vision, make a person choke or tear up, or render a person unconscious. Because of this new ISO standard, these effects of smoke are supposed to be taken into account when regulating the size and placement of exits and the types of materials allowed in buildings. But to meet the standard, one needs to know more about the smoke produced by burning various materials. Working with the National Institute of Standards and Technology, the FPRF is laying the scientific groundwork needed to put the new standard into practice. The foundation recently completed the project's second phase of its International study of the Sub-lethal Effects of Fire Smoke on Survivability and Health. In the most recent phase of the study, the foundation's researchers performed three tests: They burned a sofa made of upholstered cushions on a steel frame, some particle board bookcases, and some household cable. In each case, the materials were burned in a room with a long adjacent corridor. The researchers measured the toxic gases emitted by each item, and how quickly the gases filled the room and moved down the corridor. They determined when and where in the room and in the hallway people would have to stop because of the smoke or the heat. Fire-test laboratories and manufacturers are expected to use this data to develop smaller-scale tests that can be done in a laboratory, so they won't need to set a room on fire every time they test a product. FPRF is uniquely equipped to conduct such studies, and NFPA officials expect more lives to be saved because of the new fire-safety standards that will emerge from this work.

By allowing and specifying the use of "duct cable," this proposal supports the use of materials counter to the findings already available in the public domain regarding sub-lethal toxicity of hydrogen fluoride and through the NFPA Fire Protection Research Foundation regarding incapacitation factors. Polymers used in duct cable and other limited combustible cable materials far exceed the incapacitation factor of other materials used in various cable construction both in generation of sub-lethal constituents and in hypertoxicity.
Panel Meeting Action: Accept
Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:

"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."

This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.

Number Eligible to Vote: 15

Ballot Results: Affirmative: 13 Abstain: 2

Comment on Affirmative:

OHDE: See my Affirmative Comment for Comment 16-34.

Explanation of Abstention:

DORNA: See my Explanation of Abstention for Comment 16-34.

KAHN: See my Explanation of Abstention on Comment 16-34.

16-431 Log #2326 NEC-P16 **Final Action: Accept**
(800.50, 800.51 and 800.53)

Note: See the Technical Correlating Committee Note on Comment 16-452.

Submitter: Frank Bisbee, Communication Planning Corporation

Comment on Proposal No: 16-119

Recommendation: Reject this proposal.

Substantiation: In recognizing the use of "duct cable" or "limited combustible cable," the proposal fails to consider toxicity of the newly specified product and the relative incapacitation factor presented by the chemical constituents of the polymer in new cable design. A recent study by the NFPA Fire Protection Research Foundation has advanced an international effort to make certain that people can escape a burning building before being incapacitated (overcome by smoke or gases generated by thermal decomposition). The work is part of a revolution in fire safety in which codes and standards are beginning to address how much smoke, or gases generated by thermal decomposition, will incapacitate people, rather than how much will kill them.

The jacketing and insulating materials used in duct cable and limited combustible cable are subject to heat decomposition and the emission of sub-lethal toxic fumes. Some of these fumes can incapacitate (blinding and choking) the building occupants. The requirements for using "duct cable" have failed to recognize toxicity or emissions that are essentially colorless (i.e. hydrogen fluoride, which converts to hydrofluoric acid upon contact with any moisture, and other toxic gases may be generated).

In 2002, the ISO (International Organization for Standardization), a network of the industrial-standards institutes of 147 countries, put forth a new standard calling for attention to the "sub-lethal" effects of smoke - when the heat, the thickness of smoke, and the toxic gases in smoke will block vision, make a person choke or tear up, or render a person unconscious. Because of this new ISO standard, these effects of smoke are supposed to be taken into account when regulating the size and placement of exits and the types of materials allowed in buildings. But to meet the standard, one needs to know more about the smoke produced by burning various materials. Working with the National Institute of Standards and Technology, the FPRF is laying the scientific groundwork needed to put the new standard into practice. The foundation recently completed the project's second phase of its International study of the Sub-lethal Effects of Fire Smoke on Survivability and Health. In the most recent phase of the study, the foundation's researchers performed three tests: They burned a sofa made of upholstered cushions on a steel frame, some particle board bookcases, and some household cable. In each case, the materials were burned in a room with a long adjacent corridor. The researchers measured the toxic gases emitted by each item, and how quickly the gases filled the room and moved down the corridor. They determined when and where in the room and in the hallway people would have to stop because of the smoke or the heat. Fire-test laboratories and manufacturers are expected to use this data to develop smaller-scale tests that can be done in a laboratory, so they won't need to set a room on fire every time they test a product. FPRF is uniquely equipped to conduct such studies, and NFPA officials expect more lives to be saved because of the new fire-safety standards that will emerge from this work.

By allowing and specifying the use of "duct cable," this proposal supports the use of materials counter to the findings already available in the public domain regarding sub-lethal toxicity of hydrogen fluoride and through the NFPA Fire Protection Research Foundation regarding incapacitation factors. Polymers used in duct cable and other limited combustible cable materials far exceed the incapacitation factor of other materials used in various cable construction both in generation of sub-lethal constituents and in hypertoxicity.

Panel Meeting Action: Accept

Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:

"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."

This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.

Number Eligible to Vote: 15

Ballot Results: Affirmative: 13 Abstain: 2

Comment on Affirmative:

OHDE: See my Affirmative Comment for Comment 16-34.

Explanation of Abstention:

DORNA: See my Explanation of Abstention for Comment 16-34.

KAHN: See my Explanation of Abstention on Comment 16-34.

16-432 Log #2344 NEC-P16 **Final Action: Accept**
(800.50, 800.51 and 800.53)

Note: See the Technical Correlating Committee Note on Comment 16-452.

Submitter: Frank Bisbee, Communication Planning Corporation

Comment on Proposal No: 16-122

Recommendation: Reject this proposal.

Substantiation: In recognizing the use of "duct cable" or "limited combustible cable," the proposal fails to consider toxicity of the newly specified product and the relative incapacitation factor presented by the chemical constituents of the polymer in new cable design. A recent study by the NFPA Fire Protection Research Foundation has advanced an international effort to make certain that people can escape a burning building before being incapacitated (overcome by smoke or gases generated by thermal decomposition). The work is part of a revolution in fire safety in which codes and standards are beginning to address how much smoke, or gases generated by thermal decomposition, will incapacitate people, rather than how much will kill them.

The jacketing and insulating materials used in duct cable and limited combustible cable are subject to heat decomposition and the emission of sub-lethal toxic fumes. Some of these fumes can incapacitate (blinding and choking) the building occupants. The requirements for using "duct cable" have failed to recognize toxicity or emissions that are essentially colorless (i.e. hydrogen fluoride, which converts to hydrofluoric acid upon contact with any moisture, and other toxic gases may be generated).

In 2002, the ISO (International Organization for Standardization), a network of the industrial-standards institutes of 147 countries, put forth a new standard calling for attention to the "sub-lethal" effects of smoke - when the heat, the thickness of smoke, and the toxic gases in smoke will block vision, make a person choke or tear up, or render a person unconscious. Because of this new ISO standard, these effects of smoke are supposed to be taken into account when regulating the size and placement of exits and the types of materials allowed in buildings. But to meet the standard, one needs to know more about the smoke produced by burning various materials. Working with the National Institute of Standards and Technology, the FPRF is laying the scientific groundwork needed to put the new standard into practice. The foundation recently completed the project's second phase of its International study of the Sub-lethal Effects of Fire Smoke on Survivability and Health. In the most recent phase of the study, the foundation's researchers performed three tests: They burned a sofa made of upholstered cushions on a steel frame, some particle board bookcases, and some household cable. In each case, the materials were burned in a room with a long adjacent corridor. The researchers measured the toxic gases emitted by each item, and how quickly the gases filled the room and moved down the corridor. They determined when and where in the room and in the hallway people would have to stop because of the smoke or the heat. Fire-test laboratories and manufacturers are expected to use this data to develop smaller-scale tests that can be done in a laboratory, so they won't need to set a room on fire every time they test a product. FPRF is uniquely equipped to conduct such studies, and NFPA officials expect more lives to be saved because of the new fire-safety standards that will emerge from this work.

By allowing and specifying the use of "duct cable," this proposal supports the use of materials counter to the findings already available in the public domain regarding sub-lethal toxicity of hydrogen fluoride and through the NFPA Fire Protection Research Foundation regarding incapacitation factors. Polymers used in duct cable and other limited combustible cable materials far exceed the incapacitation factor of other materials used in various cable construction both in generation of sub-lethal constituents and in hypertoxicity.

Panel Meeting Action: Accept

Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:

"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."

This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.

Number Eligible to Vote: 15
Ballot Results: Affirmative: 13 Abstain: 2
Comment on Affirmative:
OHDE: See my Affirmative Comment for Comment 16-34.
Explanation of Abstention:
DORNA: See my Explanation of Abstention for Comment 16-34.
KAHN: See my Explanation of Abstention on Comment 16-34.

16-433 Log #2345 NEC-P16 **Final Action: Accept**
(800.50, 800.51 and 800.53)

Note: See the Technical Correlating Committee Note on Comment 16-452.
Submitter: Frank Bisbee, Communication Planning Corporation
Comment on Proposal No: 16-124
Recommendation: Reject this proposal.
Substantiation: In recognizing the use of "duct cable" or "limited combustible cable," the proposal fails to consider toxicity of the newly specified product and the relative incapacitation factor presented by the chemical constituents of the polymer in new cable design. A recent study by the NFPA Fire Protection Research Foundation has advanced an international effort to make certain that people can escape a burning building before being incapacitated (overcome by smoke or gases generated by thermal decomposition). The work is part of a revolution in fire safety in which codes and standards are beginning to address how much smoke, or gases generated by thermal decomposition, will incapacitate people, rather than how much will kill them.

The jacketing and insulating materials used in duct cable and limited combustible cable are subject to heat decomposition and the emission of sub-lethal toxic fumes. Some of these fumes can incapacitate (blinding and choking) the building occupants. The requirements for using "duct cable" have failed to recognize toxicity or emissions that are essentially colorless (i.e. hydrogen fluoride, which converts to hydrofluoric acid upon contact with any moisture, and other toxic gases may be generated).

In 2002, the ISO (International Organization for Standardization), a network of the industrial-standards institutes of 147 countries, put forth a new standard calling for attention to the "sub-lethal" effects of smoke - when the heat, the thickness of smoke, and the toxic gases in smoke will block vision, make a person choke or tear up, or render a person unconscious. Because of this new ISO standard, these effects of smoke are supposed to be taken into account when regulating the size and placement of exits and the types of materials allowed in buildings. But to meet the standard, one needs to know more about the smoke produced by burning various materials. Working with the National Institute of Standards and Technology, the FPRF is laying the scientific groundwork needed to put the new standard into practice. The foundation recently completed the project's second phase of its International study of the Sub-lethal Effects of Fire Smoke on Survivability and Health. In the most recent phase of the study, the foundation's researchers performed three tests: They burned a sofa made of upholstered cushions on a steel frame, some particle board bookcases, and some household cable. In each case, the materials were burned in a room with a long adjacent corridor. The researchers measured the toxic gases emitted by each item, and how quickly the gases filled the room and moved down the corridor. They determined when and where in the room and in the hallway people would have to stop because of the smoke or the heat. Fire-test laboratories and manufacturers are expected to use this data to develop smaller-scale tests that can be done in a laboratory, so they won't need to set a room on fire every time they test a product. FPRF is uniquely equipped to conduct such studies, and NFPA officials expect more lives to be saved because of the new fire-safety standards that will emerge from this work.

By allowing and specifying the use of "duct cable," this proposal supports the use of materials counter to the findings already available in the public domain regarding sub-lethal toxicity of hydrogen fluoride and through the NFPA Fire Protection Research Foundation regarding incapacitation factors. Polymers used in duct cable and other limited combustible cable materials far exceed the incapacitation factor of other materials used in various cable construction both in generation of sub-lethal constituents and in hypertoxicity.
Panel Meeting Action: Accept
Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:

"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."

This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.
Number Eligible to Vote: 15
Ballot Results: Affirmative: 13 Abstain: 2
Comment on Affirmative:
OHDE: See my Affirmative Comment for Comment 16-34.
Explanation of Abstention:
DORNA: See my Explanation of Abstention for Comment 16-34.
KAHN: See my Explanation of Abstention on Comment 16-34.

16-434 Log #2346 NEC-P16 **Final Action: Accept**
(800.50, 800.51, and 800.53)

Note: See the Technical Correlating Committee Note on Comment 16-452.
Submitter: Frank Bisbee, Communication Planning Corporation
Comment on Proposal No: 16-121
Recommendation: Reject this proposal.
Substantiation: In recognizing the use of "duct cable" or "limited combustible cable," the proposal fails to consider toxicity of the newly specified product and the relative incapacitation factor presented by the chemical constituents of the polymer in new cable design. A recent study by the NFPA Fire Protection Research Foundation has advanced an international effort to make certain that people can escape a burning building before being incapacitated (overcome by smoke or gases generated by thermal decomposition). The work is part of a revolution in fire safety in which codes and standards are beginning to address how much smoke, or gases generated by thermal decomposition, will incapacitate people, rather than how much will kill them.

The jacketing and insulating materials used in duct cable and limited combustible cable are subject to heat decomposition and the emission of sub-lethal toxic fumes. Some of these fumes can incapacitate (blinding and choking) the building occupants. The requirements for using "duct cable" have failed to recognize toxicity or emissions that are essentially colorless (i.e. hydrogen fluoride, which converts to hydrofluoric acid upon contact with any moisture, and other toxic gases may be generated).

In 2002, the ISO (International Organization for Standardization), a network of the industrial-standards institutes of 147 countries, put forth a new standard calling for attention to the "sub-lethal" effects of smoke - when the heat, the thickness of smoke, and the toxic gases in smoke will block vision, make a person choke or tear up, or render a person unconscious. Because of this new ISO standard, these effects of smoke are supposed to be taken into account when regulating the size and placement of exits and the types of materials allowed in buildings. But to meet the standard, one needs to know more about the smoke produced by burning various materials. Working with the National Institute of Standards and Technology, the FPRF is laying the scientific groundwork needed to put the new standard into practice. The foundation recently completed the project's second phase of its International study of the Sub-lethal Effects of Fire Smoke on Survivability and Health. In the most recent phase of the study, the foundation's researchers performed three tests: They burned a sofa made of upholstered cushions on a steel frame, some particle board bookcases, and some household cable. In each case, the materials were burned in a room with a long adjacent corridor. The researchers measured the toxic gases emitted by each item, and how quickly the gases filled the room and moved down the corridor. They determined when and where in the room and in the hallway people would have to stop because of the smoke or the heat. Fire-test laboratories and manufacturers are expected to use this data to develop smaller-scale tests that can be done in a laboratory, so they won't need to set a room on fire every time they test a product. FPRF is uniquely equipped to conduct such studies, and NFPA officials expect more lives to be saved because of the new fire-safety standards that will emerge from this work.

By allowing and specifying the use of "duct cable," this proposal supports the use of materials counter to the findings already available in the public domain regarding sub-lethal toxicity of hydrogen fluoride and through the NFPA Fire Protection Research Foundation regarding incapacitation factors. Polymers used in duct cable and other limited combustible cable materials far exceed the incapacitation factor of other materials used in various cable construction both in generation of sub-lethal constituents and in hypertoxicity.
Panel Meeting Action: Accept
Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:

"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."

This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.
Number Eligible to Vote: 15
Ballot Results: Affirmative: 13 Abstain: 2

Comment on Affirmative:
OHDE: See my Affirmative Comment for Comment 16-34.
Explanation of Abstention:
DORNA: See my Explanation of Abstention for Comment 16-34.
KAHN: See my Explanation of Abstention on Comment 16-34.

16-435 Log #2348 NEC-P16 **Final Action: Accept**
(800.50, 800.51 and 800.53)

Note: See the Technical Correlating Committee Note on Comment 16-452.
Submitter: Frank Bisbee, Communication Planning Corporation
Comment on Proposal No: 16-123
Recommendation: Reject this proposal.
Substantiation: In recognizing the use of "duct cable" or "limited combustible cable," the proposal fails to consider toxicity of the newly specified product and the relative incapacitation factor presented by the chemical constituents of the polymer in new cable design. A recent study by the NFPA Fire Protection Research Foundation has advanced an international effort to make certain that people can escape a burning building before being incapacitated (overcome by smoke or gases generated by thermal decomposition). The work is part of a revolution in fire safety in which codes and standards are beginning to address how much smoke, or gases generated by thermal decomposition, will incapacitate people, rather than how much will kill them.

The jacketing and insulating materials used in duct cable and limited combustible cable are subject to heat decomposition and the emission of sub-lethal toxic fumes. Some of these fumes can incapacitate (blinding and choking) the building occupants. The requirements for using "duct cable" have failed to recognize toxicity or emissions that are essentially colorless (i.e. hydrogen fluoride, which converts to hydrofluoric acid upon contact with any moisture, and other toxic gases may be generated).

In 2002, the ISO (International Organization for Standardization), a network of the industrial-standards institutes of 147 countries, put forth a new standard calling for attention to the "sub-lethal" effects of smoke - when the heat, the thickness of smoke, and the toxic gases in smoke will block vision, make a person choke or tear up, or render a person unconscious. Because of this new ISO standard, these effects of smoke are supposed to be taken into account when regulating the size and placement of exits and the types of materials allowed in buildings. But to meet the standard, one needs to know more about the smoke produced by burning various materials. Working with the National Institute of Standards and Technology, the FPRF is laying the scientific groundwork needed to put the new standard into practice. The foundation recently completed the project's second phase of its International study of the Sub-lethal Effects of Fire Smoke on Survivability and Health. In the most recent phase of the study, the foundation's researchers performed three tests: They burned a sofa made of upholstered cushions on a steel frame, some particle board bookcases, and some household cable. In each case, the materials were burned in a room with a long adjacent corridor. The researchers measured the toxic gases emitted by each item, and how quickly the gases filled the room and moved down the corridor. They determined when and where in the room and in the hallway people would have to stop because of the smoke or the heat. Fire-test laboratories and manufacturers are expected to use this data to develop smaller-scale tests that can be done in a laboratory, so they won't need to set a room on fire every time they test a product. FPRF is uniquely equipped to conduct such studies, and NFPA officials expect more lives to be saved because of the new fire-safety standards that will emerge from this work.

By allowing and specifying the use of "duct cable," this proposal supports the use of materials counter to the findings already available in the public domain regarding sub-lethal toxicity of hydrogen fluoride and through the NFPA Fire Protection Research Foundation regarding incapacitation factors. Polymers used in duct cable and other limited combustible cable materials far exceed the incapacitation factor of other materials used in various cable construction both in generation of sub-lethal constituents and in hypertoxicity.
Panel Meeting Action: Accept
Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:

"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."

This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.
Number Eligible to Vote: 15
Ballot Results: Affirmative: 13 Abstain: 2
Comment on Affirmative:
OHDE: See my Affirmative Comment for Comment 16-34.
Explanation of Abstention:
DORNA: See my Explanation of Abstention for Comment 16-34.
KAHN: See my Explanation of Abstention on Comment 16-34.

16-436 Log #3802 NEC-P16 **Final Action: Accept**
(800.50 and 800.51)

Note: See the Technical Correlating Committee Note on Comment 16-452.
Submitter: Marcelo M. Hirschler, GBH International / Rep. Fire Retardant Chemicals Association
Comment on Proposal No: 16-127
Recommendation: *Reject this proposal - Also reject the references to NFPA 90A in fine print notes and the creation of the new category of air duct cables and the subdivision of plenums. Revise the FPN to 800.51 as follows, and make no other changes.*

~~FPN: One method of defining low smoke-producing cables is by establishing an acceptable value of the smoke produced when tested in accordance with NFPA 262-1999, Standard Method of Test for Flame Travel and Smoke of Wires and Cables for Use in Air-Handling Spaces, to a maximum peak optical density of 0.5 and a maximum average optical density of 0.15. Similarly, one method of defining fire-resistant cables is by defining maximum allowable flame travel distance of 1.52 m (5 ft) when tested in accordance with the same test.~~

FPN: One method of defining a cable that is low smoke-producing cable and fire-resistant cable is that the cable exhibits a maximum peak optical density of 0.5 or less, an average optical density of 0.15 or less, and a maximum flame spread distance of 1.52 m (5 ft) or less when tested in accordance with NFPA 262, Standard Method of Test for Flame Travel and Smoke of Wires and Cables for Use in Air-Handling Spaces.
Substantiation: There is no need for a new category of CMD cables. There is also no justification for limiting the use of traditional plenum cables. It has become clear now that the expertise needed for choosing the type of wiring systems permitted in any space should be the prerogative of the NEC, which (through its various panels and its Technical Correlating Committee) has greater expertise and a broader view than the Technical Committee on Air Conditioning (responsible for NFPA 90A). Therefore, the NEC panels should continue making their own choices regarding wiring methods. The issue of correlation (or even reference) to either NFPA 90A or the categories of plenums used in NFPA 90A should be rejected by CMP 16.

Furthermore, the reference to NFPA 90A is not appropriate in the Fine Print Note, since NFPA 90A is not a suitable standard for testing or listing wiring methods. The logical way to have a fine print note is to reference the standard used for testing the fire safety of the materials, which in this case is a combination of NFPA 255 and NFPA 259, or the UL Subject 2424 that contains all the listing requirements.

See further information in the comment I made to recommend rejection of proposal 16-112.
Panel Meeting Action: Accept
Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:

"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."

This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.
Number Eligible to Vote: 15
Ballot Results: Affirmative: 13 Abstain: 2
Comment on Affirmative:
OHDE: See my Affirmative Comment for Comment 16-34.
Explanation of Abstention:
DORNA: See my Explanation of Abstention for Comment 16-34.
KAHN: See my Explanation of Abstention on Comment 16-34.

16-437 Log #1456 NEC-P16 **Final Action: Accept in Principle**
(800.50 Exception No. 3)

Submitter: Technical Correlating Committee on Signaling Systems for the Protection of Life and Property
Comment on Proposal No: 16-107
Recommendation: Continue to accept.
Substantiation: The Signaling Systems for the Protection of Life and Property TCC agrees that unlisted outside plant cables should not be permitted in air ducts, risers or any type of plenum because of the increased fire hazard these non-fire-resistant cables create. Permitting these cables in air ducts or any type of plenum is a violation of NFPA 90A, *Standard for the Installation of Air-Conditioning and Ventilating Systems*.

Panel Meeting Action: Accept in Principle
Panel Statement: See panel action and statement on Comment 16-391.
Number Eligible to Vote: 15
Ballot Results: Affirmative: 13 Negative: 2
Explanation of Negative:
JENSEN: Delete the term "air duct" in the Panel meeting action of Exception No. 1. Air ducts are not defined and this comment goes against Standards Council Decision 03-10-25. OHDE: See my Explanation of Negative vote on Comment 16-391.

16-438 Log #1500 NEC-P16 **Final Action: Accept in Principle**
(800.50 Exception No. 3)

Submitter: Marcelo M. Hirschler, GBH International / Rep. Fire Retardant Chemicals
Comment on Proposal No: 16-106
Recommendation: 800.50 Exception No. 3: Exception No. 1: Unlisted outside plant communications cables shall be permitted within buildings in spaces other than risers, ducts, plenums and other air-handling spaces (as described in Section 300.22), ~~air ducts, ceiling cavity plenums, raised floor plenums, duct distribution plenums, apparatus casing plenums, and air-handling unit room plenums~~ where the length of unlisted communications cable within the building, measured from its point of entrance, does not exceed 15 m (50 ft) and the unlisted outside plant communications cable enters the building from the outside and is terminated in an enclosure.
Substantiation: The language in this exception should refer to the sections of the code as described in Article 300, since there is no need to introduce these new designations of subdivisions of plenum spaces. The creation of these new subdivisions should not be accepted. The terminology in NEC 2002 is correct and needs no change.
See also the substantiation for my comments on proposal 16-59.
Panel Meeting Action: Accept in Principle
Panel Statement: See panel action and statement on Comment 16-391. See panel action and panel statement on Comment 16-391, which is editorially similar and accomplishes the submitter's purpose.
Number Eligible to Vote: 15
Ballot Results: Affirmative: 14 Negative: 1
Explanation of Negative:
OHDE: See my Explanation of Negative vote on Comment 16-397.

16-439 Log #1501 NEC-P16 **Final Action: Accept in Principle**
(800.50 Exception No. 3)

Submitter: Marcelo M. Hirschler, GBH International / Rep. Fire Retardant Chemicals
Comment on Proposal No: 16-107
Recommendation: 800.50 Exception No. 3:
Exception No. 1: Unlisted outside plant communications cables shall be permitted within buildings in spaces other than risers, ducts, plenums and other air-handling spaces (as described in Section 300.22), ~~air ducts, ceiling cavity plenums, raised floor plenums, duct distribution plenums, apparatus casing plenums, and air-handling unit room plenums~~ where the length of unlisted communications cable within the building, measured from its point of entrance, does not exceed 15 m (50 ft) and the unlisted outside plant communications cable enters the building from the outside and is terminated in an enclosure.
Substantiation: The language in this exception should refer to the sections of the code as described in Article 300, since there is no need to introduce these new designations of subdivisions of plenum spaces. The creation of these new subdivisions should not be accepted. The terminology in NEC 2002 is correct and needs no change.
See also the substantiation for my comments on proposal 16-59.
Panel Meeting Action: Accept in Principle
Panel Statement: See panel action and statement on Comment 16-391. See panel action and panel statement on Comment 16-391, which is editorially similar and accomplishes the submitter's purpose.
Number Eligible to Vote: 15
Ballot Results: Affirmative: 14 Negative: 1
Explanation of Negative:
OHDE: See my Explanation of Negative vote on Comment 16-397.

16-440 Log #1744 NEC-P16 **Final Action: Reject**
(800.50 Exception No. 3)

Submitter: Michael I. Callanan, IBEW
Comment on Proposal No: 16-101
Recommendation: This proposal should have been "Accept in Principle" with the following revised text for 800-50 Exception No. 3; Unlisted outside plant communications cables shall be permitted where the length of the cable within the building, measured from its point of entrance, does not exceed 15m (50 ft) and the cable enters the building from the outside and is terminated in an enclosure. Note: Submitter used incorrect code reference in his proposal. He used 800.50 Exception No. 1 and should have used 800-50 Exception No. 3.
Substantiation: The submitter has submitted terms that has no positive effect on the National Electrical Code. These terms will add confusion and not clarity to an electrical code section that covers wiring in spaces that provide environmental air. The present language in the 2002 National Electrical Code Section 300.22(B) - Ducts or Plenums for Environmental Air and Section 300.22(C) - Other Space Used for Environmental Air covers in great detail which type of wiring methods should be used and implemented in these spaces. Code Making Panel 3, which has the responsibility for Section 300-22 has not made any changes to this section in the 2005 ROP stage that would allow any changes to be permitted in these spaces (See Proposal 3-94 panel statement).
The terms air-handling unit room plenum, apparatus casing plenum, ceiling cavity plenum, duct distribution plenum and raised floor plenum as listed in the NFPA 90A Standard, 2002, are statements and cannot possibly be used as definitions. The submitter of this proposal has stated that the source for these definitions is the NFPA 90A and yet the terms are used and identified differently in the NFPA 90A than in this proposal. There is too much confusion with these terms as how they are identified in the NFPA 90A Standard and the proposed 2005 ROP for the NEC. This is a definite correlating problem that exists and will continue to do so until it is fixed.
Chapter 3 of the NFPA 90A, Standard for the Installation of Air Conditioning and Ventilating Systems, 2002 edition, lists and identifies terminology that are officially recognized as Definitions to be used throughout the NFPA 90A Standard. In regards to the following terms: air duct, air-handling unit room plenum, apparatus casing plenum, ceiling cavity plenum, duct distribution plenum, and raised floor plenum; only one of the terms is properly identified and listed as a definition. Under 3.3 General Definitions and more specifically 3.3.5 - Air Duct. A conduit or passageway for conveying air to or from heating, cooling, air conditioning, or ventilating equipment, but not including the plenum. Cavity plenum, duct distribution plenum, and raised floor plenum, they are all listed and identified in Chapter 4 of NFPA 90A Standard under the heading of HVAC Systems. These 5 terms are listed and worded differently than those identical terms that are proposed in the 2005 ROP for the NEC. Here is a breakdown of the 5 terms listed in the 2005 ROP and also NFPA 90A, 2002 Standard.
Air-Handling Unit Room Plenum as listed in NFPA 90A Standard, 2002; 4.3.10.5.1 - Individual rooms containing an air-handling unit(s) shall gather return air from various sources and combine the return air within the room for returning to the air-handling unit.
Air-Handling Unit Room Plenum as listed in the 2005 ROP for the NEC: An individual room containing an air-handling unit(s) used to gather return air from various sources and combine the return air within the room for returning to the air-handling unit.
Apparatus Casing Plenum as listed in NFPA 90A Standard; 4.3.10.4.1 - A fabricated plenum and apparatus casing shall be permitted to be used for supply, return, or exhaust air service.
Apparatus Casing Plenum as listed in the 2005 ROP for the NEC: A fabricated plenum and apparatus casing used for supply, return, or exhaust air service.
Ceiling Cavity Plenum as listed in NFPA 90A Standard - 2002; 4.3.10.2 - The space between the top of the finished ceiling and the underside of the floor **of the floor** or roof above shall be permitted to be used to supply air to the occupied area, or return or exhaust air from the occupied area, provided that the conditions in 4.3.10.2.1 through 4.3.10.2.8 are met.
Ceiling Cavity Plenum as listed in the 2005 ROP for the NEC: The space between the top of the finished ceiling and the underside of the floor **of the floor** or roof above where used to supply air to the occupied area, or return or exhaust air from the occupied area.
Duct Distribution Plenum as listed in the NFPA 90A Standard, 2002; 4.3.10.3 - A duct enclosure used for the multiple distribution or gathering of ducts or connectors shall be constructed of materials and methods specified in 4.3.1.
Duct Distribution Plenum as listed in the 2005 ROP for the NEC. A duct enclosure used for the multiple distribution or gathering of ducts or connectors.
Raised Floor Plenum as listed in the NFPA 90A Standard, 2002; 4.3.10.6.1 - The space between the top of the finished floor and the underside of a raised floor shall be permitted to be used to supply air to the occupied area, or return or exhaust air from or return and exhaust air from the occupied area, provided that the conditions in 4.3.10.6.2 through 4.3.10.6.8 are met.
Raised Floor Plenum as listed in the 2005 ROP for the NEC: The space between the top of the finished floor and the underside of a raised floor where used to supply air to the occupied area, or return or exhaust air from the occupied area.
The terms air-handling unit room plenum, apparatus casing plenum, ceiling cavity plenum, duct distribution plenum and raised floor plenum as listed in the NFPA 90A Standard - 2002 are statements and cannot possibly be used as definitions. The submitter of this proposal has stated that the source for these - definitions is the NFPA 90A and yet the terms are used and identified differently in the NFPA 90A than in this proposal. There is too much confusion with these terms as how they are identified in the NFPA 90A Standard and the proposed 2005 ROP for the NEC. This is a definite correlating problem that exists and will continue to do so until it is fixed.

This comment represents the official position of the International Brotherhood of Electrical Workers Codes and Standards Committee.
Panel Meeting Action: Reject
Panel Statement: The revised text accepted by the panel in its action on Comment 16-391 explicitly enumerates the places where entrance cable is prohibited. The text enumerates the prohibited spaces rather than referring a communications installer to the power wiring requirements in 300.22.
As worded, the original comment would continue to allow unlisted outside plant cable in risers, which is not the panel's intent.
Number Eligible to Vote: 15
Ballot Results: Affirmative: 15

16-441 Log #1745 NEC-P16 **Final Action: Reject**
(800.50 Exception No. 3)

Submitter: Michael I. Callanan, IBEW
Comment on Proposal No: 16-102
Recommendation: I agree with the Panel Action to "Accept in Principle" with the following revised text for 800-50 Exception No. 3: Unlisted outside plant communications cables shall be permitted where the length of the cable within the building, measured from its point of entrance, does not exceed 15 m (50 ft) and the cable enters the building from the outside and is terminated in an enclosure.
Substantiation: The submitter has submitted terms that has no positive effect on the National Electrical Code. These terms will add confusion and not clarity to an electrical code section that covers wiring in spaces that provide environmental air. The present language in the 2002 National Electrical Code Section 300.22(B) - Ducts or Plenums for Environmental Air and Section 300.22(C) - Other Space Used for Environmental Air covers in great detail which type of wiring methods should be used and implemented in these spaces. Code Making Panel 3, which has the responsibility for Section 300-22 has not made any changes to this section in the 2005 ROP stage that would allow any changes to be permitted in these spaces (See Proposal 3-94 panel statement).
The terms air-handling unit room plenum, apparatus casing plenum, ceiling cavity plenum, duct distribution plenum and raised floor plenum as listed in the NFPA 90A Standard, 2002, are statements and cannot possibly be used as definitions. The submitter of this proposal has stated that the source for these definitions is the NFPA 90A and yet the terms are used and identified differently in the NFPA 90A than in this proposal. There is too much confusion with these terms as how they are identified in the NFPA 90A Standard and the proposed 2005 ROP for the NEC. This is a definite correlating problem that exists and will continue to do so until it is fixed.
Chapter 3 of the NFPA 90A, Standard for the Installation of Air Conditioning and Ventilating Systems, 2002 edition, lists and identifies terminology that are officially recognized as Definitions to be used throughout the NFPA 90A Standard. In regards to the following terms: air duct, air-handling unit room plenum, apparatus casing plenum, ceiling cavity plenum, duct distribution plenum, and raised floor plenum; only one of the terms is properly identified and listed as a definition. Under 3.3 General Definitions and more specifically 3.3.5 - Air Duct. A conduit or passageway for conveying air to or from heating, cooling, air conditioning, or ventilating equipment, but not including the plenum. Cavity plenum, duct distribution plenum, and raised floor plenum, they are all listed and identified in Chapter 4 of NFPA 90A Standard under the heading of HVAC Systems. These 5 terms are listed and worded differently than those identical terms that are proposed in the 2005 ROP for the NEC. Here is a breakdown of the 5 terms listed in the 2005 ROP and also NFPA 90A, 2002 Standard.
Air-Handling Unit Room Plenum as listed in NFPA 90A Standard, 2002; 4.3.10.5.1 - Individual rooms containing an air-handling unit(s) shall gather return air from various sources and combine the return air within the room for returning to the air-handling unit.
Air-Handling Unit Room Plenum as listed in the 2005 ROP for the NEC: An individual room containing an air-handling unit(s) used to gather return air from various sources and combine the return air within the room for returning to the air-handling unit.
Apparatus Casing Plenum as listed in NFPA 90A Standard; 4.3.10.4.1 - A fabricated plenum and apparatus casing shall be permitted to be used for supply, return, or exhaust air service.
Apparatus Casing Plenum as listed in the 2005 ROP for the NEC: A fabricated plenum and apparatus casing used for supply, return, or exhaust air service.
Ceiling Cavity Plenum as listed in NFPA 90A Standard - 2002; 4.3.10.2 - The space between the top of the finished ceiling and the underside of the floor **of the floor** or roof above shall be permitted to be used to supply air to the occupied area, or return or exhaust air from the occupied area, provided that the conditions in 4.3.10.2.1 through 4.3.10.2.8 are met.
Ceiling Cavity Plenum as listed in the 2005 ROP for the NEC: The space between the top of the finished ceiling and the underside of the floor **of the floor** or roof above where used to supply air to the occupied area, or return or exhaust air from the occupied area.
Duct Distribution Plenum as listed in the NFPA 90A Standard, 2002; 4.3.10.3 - A duct enclosure used for the multiple distribution or gathering of ducts or connectors shall be constructed of materials and methods specified in 4.3.1.
Duct Distribution Plenum as listed in the 2005 ROP for the NEC. A duct enclosure used for the multiple distribution or gathering of ducts or connectors.
Raised Floor Plenum as listed in the NFPA 90A Standard, 2002; 4.3.10.6.1 - The space between the top of the finished floor and the underside of a raised floor shall be permitted to be used to supply air to the occupied area, or return or exhaust air from or return and exhaust air from the occupied area, provided that the conditions in 4.3.10.6.2 through 4.3.10.6.8 are met.
Raised Floor Plenum as listed in the 2005 ROP for the NEC: The space between the top of the finished floor and the underside of a raised floor where used to supply air to the occupied area, or return or exhaust air from the occupied area.
The terms air-handling unit room plenum, apparatus casing plenum, ceiling cavity plenum, duct distribution plenum and raised floor plenum as listed in the NFPA 90A Standard - 2002 are statements and cannot possibly be used as definitions. The submitter of this proposal has stated that the source for these - definitions is the NFPA 90A and yet the terms are used and identified differently in the NFPA 90A than in this proposal. There is too much confusion with these terms as how they are identified in the NFPA 90A Standard and the proposed 2005 ROP for the NEC. This is a definite correlating problem that exists and will continue to do so until it is fixed.
This comment represents the official position of the International Brotherhood of Electrical Workers Codes and Standards Committee.
Panel Meeting Action: Reject
Panel Statement: The revised text accepted by the panel in its action on Comment 16-391 explicitly enumerates the places where entrance cable is prohibited. The text enumerates the prohibited spaces rather than referring a communications installer to the power wiring requirements in 300.22.
As worded, the original comment would continue to allow unlisted outside plant cable in risers, which is not the panel's intent.
Number Eligible to Vote: 15
Ballot Results: Affirmative: 15

16-442 Log #1747 NEC-P16 **Final Action: Reject**
(800.50 Exception No. 3)

Submitter: Michael I. Callanan, IBEW
Comment on Proposal No: 16-106
Recommendation: I agree with the Panel Action to "Accept in Principle" with the following revised text for 800-50 Exception No. 3: Unlisted outside plant communications cables shall be permitted where the length of the cable within the building, measured from its point of entrance, does not exceed 15 m (50 ft) and the cable enters the building from the outside and is terminated in an enclosure.
Substantiation: The submitter has submitted terms that has no positive effect on the National Electrical Code. These terms will add confusion and not clarity to an electrical code section that covers wiring in spaces that provide environmental air. The present language in the 2002 National Electrical Code Section 300.22(B) - Ducts or Plenums for Environmental Air and Section 300.22(C) - Other Space Used for Environmental Air covers in great detail which type of wiring methods should be used and implemented in these spaces. Code Making Panel 3, which has the responsibility for Section 300-22 has not made any changes to this section in the 2005 ROP stage that would allow any changes to be permitted in these spaces (See Proposal 3-94 panel statement).
The terms air-handling unit room plenum, apparatus casing plenum, ceiling cavity plenum, duct distribution plenum and raised floor plenum as listed in the NFPA 90A Standard, 2002, are statements and cannot possibly be used as definitions. The submitter of this proposal has stated that the source for these definitions is the NFPA 90A and yet the terms are used and identified differently in the NFPA 90A than in this proposal. There is too much confusion with these terms as how they are identified in the NFPA 90A Standard and the proposed 2005 ROP for the NEC. This is a definite correlating problem that exists and will continue to do so until it is fixed.
Chapter 3 of the NFPA 90A, Standard for the Installation of Air Conditioning and Ventilating Systems, 2002 edition, lists and identifies terminology that are officially recognized as Definitions to be used throughout the NFPA 90A Standard. In regards to the following terms: air duct, air-handling unit room plenum, apparatus casing plenum, ceiling cavity plenum, duct distribution plenum, and raised floor plenum; only one of the terms is properly identified and listed as a definition. Under 3.3 General Definitions and more specifically 3.3.5 - Air Duct. A conduit or passageway for conveying air to or from heating, cooling, air conditioning, or ventilating equipment, but not including the plenum. Cavity plenum, duct distribution plenum, and raised floor plenum, they are all listed and identified in Chapter 4 of NFPA 90A Standard under the heading of HVAC Systems. These 5 terms are listed and worded differently than those identical terms that are proposed in the 2005 ROP for the NEC. Here is a breakdown of the 5 terms listed in the 2005 ROP and also NFPA 90A, 2002 Standard.
Air-Handling Unit Room Plenum as listed in NFPA 90A Standard, 2002; 4.3.10.5.1 - Individual rooms containing an air-handling unit(s) shall gather return air from various sources and combine the return air within the room for returning to the air-handling unit.

Air-Handling Unit Room Plenum as listed in the 2005 ROP for the NEC: An individual room containing an air-handling unit(s) used to gather return air from various sources and combine the return air within the room for returning to the air-handling unit.

Apparatus Casing Plenum as listed in NFPA 90A Standard; 4.3.10.4.1 - A fabricated plenum and apparatus casing shall be permitted to be used for supply, return, or exhaust air service.

Apparatus Casing Plenum as listed in the 2005 ROP for the NEC: A fabricated plenum and apparatus casing used for supply, return, or exhaust air service.

Ceiling Cavity Plenum as listed in NFPA 90A Standard - 2002; 4.3.10.2 - The space between the top of the finished ceiling and the underside of the floor **of the floor** or roof above shall be permitted to be used to supply air to the occupied area, or return or exhaust air from the occupied area, provided that the conditions in 4.3.10.2.1 through 4.3.10.2.8 are met.

Ceiling Cavity Plenum as listed in the 2005 ROP for the NEC: The space between the top of the finished ceiling and the underside of the floor **of the floor** or roof above where used to supply air to the occupied area, or return or exhaust air from the occupied area.

Duct Distribution Plenum as listed in the NFPA 90A Standard, 2002; 4.3.10.3 - A duct enclosure used for the multiple distribution or gathering of ducts or connectors shall be constructed of materials and methods specified in 4.3.1.

Duct Distribution Plenum as listed in the 2005 ROP for the NEC. A duct enclosure used for the multiple distribution or gathering of ducts or connectors.

Raised Floor Plenum as listed in the NFPA 90A Standard, 2002; 4.3.10.6.1 - The space between the top of the finished floor and the underside of a raised floor shall be permitted to be used to supply air to the occupied area, or return or exhaust air from or return and exhaust air from the occupied area, provided that the conditions in 4.3.10.6.2 through 4.3.10.6.8 are met.

Raised Floor Plenum as listed in the 2005 ROP for the NEC: The space between the top of the finished floor and the underside of a raised floor where used to supply air to the occupied area, or return or exhaust air from the occupied area.

The terms air-handling unit room plenum, apparatus casing plenum, ceiling cavity plenum, duct distribution plenum and raised floor plenum as listed in the NFPA 90A Standard - 2002 are statements and cannot possibly be used as definitions. The submitter of this proposal has stated that the source for these - definitions is the NFPA 90A and yet the terms are used and identified differently in the NFPA 90A than in this proposal. There is too much confusion with these terms as how they are identified in the NFPA 90A Standard and the proposed 2005 ROP for the NEC. This is a definite correlating problem that exists and will continue to do so until it is fixed.

This comment represents the official position of the International Brotherhood of Electrical Workers Codes and Standards Committee.

Panel Meeting Action: Reject

Panel Statement: The revised text accepted by the panel in its action on Comment 16-391 explicitly enumerates the places where entrance cable is prohibited. The text enumerates the prohibited spaces rather than referring a communications installer to the power wiring requirements in 300.22.

As worded, the original comment would continue to allow unlisted outside plant cable in risers, which is not the panel's intent.

Number Eligible to Vote: 15

Ballot Results: Affirmative: 15

16-443 Log #1748 NEC-P16 **Final Action: Reject**
(800.50 Exception No. 3)

Submitter: Michael I. Callanan, IBEW

Comment on Proposal No: 16-107

Recommendation: This proposal should have been "Accept in Principle" with the following revised text for 800-50 Exception No. 3: Unlisted outside plant communications cables shall be permitted where the length of the cable within the building, measured from its point of entrance, does not exceed 15 m (50 ft) and the cable enters the building from the outside and is terminated in an enclosure.

Substantiation: The submitter has submitted terms that has no positive effect on the National Electrical Code. These terms will add confusion and not clarity to an electrical code section that covers wiring in spaces that provide environmental air. The present language in the 2002 National Electrical Code Section 300.22(B) - Ducts or Plenums for Environmental Air and Section 300.22(C) - Other Space Used for Environmental Air covers in great detail which type of wiring methods should be used and implemented in these spaces. Code Making Panel 3, which has the responsibility for Section 300-22 has not made any changes to this section in the 2005 ROP stage that would allow any changes to be permitted in these spaces (See Proposal 3-94 panel statement).

The terms air-handling unit room plenum, apparatus casing plenum, ceiling cavity plenum, duct distribution plenum and raised floor plenum as listed in the NFPA 90A Standard, 2002, are statements and cannot possibly be used as definitions. The submitter of this proposal has stated that the source for these definitions is the NFPA 90A and yet the terms are used and identified differently in the NFPA 90A than in this proposal. There is too much confusion with these terms as how they are identified in the NFPA 90A Standard and the proposed 2005 ROP for the NEC. This is a definite correlating problem that exists and will continue to do so until it is fixed.

Chapter 3 of the NFPA 90A, Standard for the Installation of Air Conditioning and Ventilating Systems, 2002 edition, lists and identifies terminology that are officially recognized as Definitions to be used throughout the NFPA 90A Standard. In regards to the following terms: air duct, air-handling unit room plenum, apparatus casing plenum, ceiling cavity plenum, duct distribution plenum, and raised floor plenum; only one of the terms is properly identified and listed as a definition. Under 3.3 General Definitions and more specifically 3.3.5 - Air Duct. A conduit or passageway for conveying air to or from heating, cooling, air conditioning, or ventilating equipment, but not including the plenum. Cavity plenum, duct distribution plenum, and raised floor plenum, they are all listed and identified in Chapter 4 of NFPA 90A Standard under the heading of HVAC Systems. These 5 terms are listed and worded differently than those identical terms that are proposed in the 2005 ROP for the NEC. Here is a breakdown of the 5 terms listed in the 2005 ROP and also NFPA 90A, 2002 Standard.

Air-Handling Unit Room Plenum as listed in NFPA 90A Standard, 2002; 4.3.10.5.1 - Individual rooms containing an air-handling unit(s) shall gather return air from various sources and combine the return air within the room for returning to the air-handling unit.

Air-Handling Unit Room Plenum as listed in the 2005 ROP for the NEC: An individual room containing an air-handling unit(s) used to gather return air from various sources and combine the return air within the room for returning to the air-handling unit.

Apparatus Casing Plenum as listed in NFPA 90A Standard; 4.3.10.4.1 - A fabricated plenum and apparatus casing shall be permitted to be used for supply, return, or exhaust air service.

Apparatus Casing Plenum as listed in the 2005 ROP for the NEC: A fabricated plenum and apparatus casing used for supply, return, or exhaust air service.

Ceiling Cavity Plenum as listed in NFPA 90A Standard - 2002; 4.3.10.2 - The space between the top of the finished ceiling and the underside of the floor of the floor or roof above shall be permitted to be used to supply air to the occupied area, or return or exhaust air from the occupied area, provided that the conditions in 4.3.10.2.1 through 4.3.10.2.8 are met.

Ceiling Cavity Plenum as listed in the 2005 ROP for the NEC: The space between the top of the finished ceiling and the underside of the floor of the floor or roof above where used to supply air to the occupied area, or return or exhaust air from the occupied area.

Duct Distribution Plenum as listed in the NFPA 90A Standard, 2002; 4.3.10.3 - A duct enclosure used for the multiple distribution or gathering of ducts or connectors shall be constructed of materials and methods specified in 4.3.1.

Duct Distribution Plenum as listed in the 2005 ROP for the NEC. A duct enclosure used for the multiple distribution or gathering of ducts or connectors.

Raised Floor Plenum as listed in the NFPA 90A Standard, 2002; 4.3.10.6.1 - The space between the top of the finished floor and the underside of a raised floor shall be permitted to be used to supply air to the occupied area, or return or exhaust air from or return and exhaust air from the occupied area, provided that the conditions in 4.3.10.6.2 through 4.3.10.6.8 are met.

Raised Floor Plenum as listed in the 2005 ROP for the NEC: The space between the top of the finished floor and the underside of a raised floor where used to supply air to the occupied area, or return or exhaust air from the occupied area.

The terms air-handling unit room plenum, apparatus casing plenum, ceiling cavity plenum, duct distribution plenum and raised floor plenum as listed in the NFPA 90A Standard - 2002 are statements and cannot possibly be used as definitions. The submitter of this proposal has stated that the source for these - definitions is the NFPA 90A and yet the terms are used and identified differently in the NFPA 90A than in this proposal. There is too much confusion with these terms as how they are identified in the NFPA 90A Standard and the proposed 2005 ROP for the NEC. This is a definite correlating problem that exists and will continue to do so until it is fixed.

This comment represents the official position of the International Brotherhood of Electrical Workers Codes and Standards Committee.

Panel Meeting Action: Reject

Panel Statement: The revised text accepted by the panel in its action on Comment 16-391 explicitly enumerates the places where entrance cable is prohibited. The text enumerates the prohibited spaces rather than referring a communications installer to the power wiring requirements in 300.22.

As worded, the original comment would continue to allow unlisted outside plant cable in risers, which is not the panel's intent.

Number Eligible to Vote: 15

Ballot Results: Affirmative: 15

16-444 Log #1823 NEC-P16 **Final Action: Accept in Principle**
(800.50 Exception No. 3)

Submitter: Thomas P. Hammerberg, Automatic Fire Alarm Association

Comment on Proposal No: 16-107

Recommendation: Continue to accept.

Substantiation: The Automatic Fire Alarm Association agrees that unlisted outside plant cables should not be permitted in air ducts, risers or any type of plenum because of the increased fire hazard these non-fire-resistant cables create. Permitting these cables in air ducts or any type of plenum is a violation of NFPA 90A, Standard for the Installation of Air-Conditioning and Ventilating Systems.
Panel Meeting Action: Accept in Principle
Panel Statement: See panel action and statement on Comment 16-391.
Number Eligible to Vote: 15
Ballot Results: Affirmative: 13 Negative: 2
Explanation of Negative:
JENSEN: Delete the term "air duct" in the Panel meeting action of Exception No. 1. Air ducts are not defined and this comment goes against Standards Council Decision 03-10-25. OHDE: See my Explanation of Negative vote on Comment 16-391.

16-445 Log #2448 NEC-P16 **Final Action: Reject**
(800.50 Exception No. 3)

Submitter: William A. Wolfe, Steel Tube Institute of North America
Comment on Proposal No: 16-107
Recommendation: Reject this proposal.
Substantiation:
See our companion proposal on 16-37.
Panel Meeting Action: Reject
Panel Statement: The submitter's substantiation "See our companion proposal on 16-37" is not relevant to the subject of the hazards of outside plant entrance cables.
Number Eligible to Vote: 15
Ballot Results: Affirmative: 15

16-446 Log #2724 NEC-P16 **Final Action: Accept in Principle**
(800.50 Exception No. 3)

Submitter: Richard Fransen, Daikin America, Inc. / Rep. Cable Fire Research Association
Comment on Proposal No: 16-107
Recommendation: Continue to accept this proposal.
Substantiation: CFRA agrees that unlisted outside plant cables should not be permitted in air ducts, risers or any type of plenum. These cables are typically constructed with completely non-fire-resistant materials, usually polyethylene which is a high molecular weight paraffin that burns like candle wax. Furthermore, permitting these cables in air ducts or any type of plenum is a violation of NFPA 90A, Standard for the Installation of Air-Conditioning and Ventilating Systems.
Panel 16 accepted the definitions of air duct, ceiling cavity plenum, raised floor plenum, duct distribution plenum, apparatus casing plenum and air-handling unit room plenum its action on proposal 16-9.
Panel Meeting Action: Accept in Principle
Panel Statement: See panel action and statement on Comment 16-391.
Number Eligible to Vote: 15
Ballot Results: Affirmative: 13 Negative: 2
Explanation of Negative:
JENSEN: Delete the term "air duct" in the Panel meeting action of Exception No. 1. Air ducts are not defined and this comment goes against Standards Council Decision 03-10-25. OHDE: See my Explanation of Negative vote on Comment 16-391.

16-447 Log #2518gg NEC-P16 **Final Action: Reject**
(800.50 Exception No. 3)

Submitter: Vince Baclawski, National Electrical Manufacturers Association (NEMA)
Comment on Proposal No: 16-107
Recommendation: Reject this proposal.
Substantiation: See our companion comment on Proposal 1-69.
Panel Meeting Action: Reject
Panel Statement: The submitter's substantiation is not relevant to the subject of the hazards of outside plant entrance cables.
Number Eligible to Vote: 15
Ballot Results: Affirmative: 15

16-448 Log #263 NEC-P16 **Final Action: Accept**
(800.51)

Submitter: Technical Committee on Air Conditioning
Comment on Proposal No: 16-115
Recommendation: Continue to reject this proposal.

Substantiation: The Technical Committee on Air Conditioning agrees with the panel reject statement.

This comment is one in a series of comments including 16-12, 16-40, 16-60, 16-83, 16-115, 16-132, 16-138, 16-156, 16-180, 16-188, 16-195, 16-207, 16-209, 16-211, 16-228, 16-229 and 16-234.
Panel Meeting Action: Accept
Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:
"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."
This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.
Number Eligible to Vote: 15
Ballot Results: Affirmative: 13 Abstain: 2
Comment on Affirmative:
OHDE: See my Affirmative Comment for Comment 16-34.
Explanation of Abstention:
DORNA: See my Explanation of Abstention for Comment 16-34.
KAHN: See my Explanation of Abstention on Comment 16-34.

16-449 Log #291 NEC-P16 **Final Action: Reject**
(800.51)

Submitter: Technical Committee on Air Conditioning
Comment on Proposal No: 16-112
Recommendation: Continue to accept this proposal in principle and change the fine print note per our comment 16-128.
Substantiation: See the comment from the Technical Committee on Air conditioning on proposal 16-37.
Panel Meeting Action: Reject
Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:
"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."
This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.
Number Eligible to Vote: 15
Ballot Results: Affirmative: 13 Abstain: 2
Comment on Affirmative:
OHDE: See my Affirmative Comment for Comment 16-34.
Explanation of Abstention:
DORNA: See my Explanation of Abstention for Comment 16-34.
KAHN: See my Explanation of Abstention on Comment 16-34.

16-450 Log #321 NEC-P16 **Final Action: Reject**
(800.51)

Submitter: Technical Committee on Air Conditioning
Comment on Proposal No: 16-125
Recommendation: Continue to accept this proposal in principle.
Substantiation: See the comment from the Technical committee on Air Conditioning on proposal 16-112.
Panel Meeting Action: Reject
Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:
"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."

This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.
Number Eligible to Vote: 15
Ballot Results: Affirmative: 13 Abstain: 2
Comment on Affirmative:
OHDE: See my Affirmative Comment for Comment 16-34.
Explanation of Abstention:
DORNA: See my Explanation of Abstention for Comment 16-34.
KAHN: See my Explanation of Abstention on Comment 16-34.

16-451 Log #324 NEC-P16 **Final Action: Reject**
(800.51)

Submitter: Technical Committee on Air Conditioning
Comment on Proposal No: 16-126
Recommendation: Continue to accept this proposal in principle.
Substantiation: See the comment from the Technical committee on Air Conditioning on proposal 16-112.
Panel Meeting Action: Reject
Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:
"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."
This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.
Number Eligible to Vote: 15
Ballot Results: Affirmative: 13 Abstain: 2
Comment on Affirmative:
OHDE: See my Affirmative Comment for Comment 16-34.
Explanation of Abstention:
DORNA: See my Explanation of Abstention for Comment 16-34.
KAHN: See my Explanation of Abstention on Comment 16-34.

16-452 Log #1317 NEC-P16 **Final Action: Accept**
(800.51)

Note: The Technical Correlating Committee understands that the acceptance of Comment 16-452 reverts Table 800-50 back to the Table as it appears in the 2002 NEC. The Technical Correlating Committee understands that the acceptance of Comment 16-452 reinstates 800.53 as it reads in the 2002 NEC except as amended by Comment 16-615, which added a new FPN to 800.53(A). The Technical Correlating Committee understands that the acceptance of Comment 16-452 reinstates 800-51 as it reads in the 2002 NEC except as amended by Comment 16-405 and others, which revised the FPN to 800.51(A). The Technical Correlating Committee understands that the acceptance of Comment 16-452 does not Reject the acceptance of the renumbering as detailed in Comment 16-9.
Submitter: Wayne G. Carson, Carson Assoc. Inc.
Comment on Proposal No: 16-112
Recommendation: Reject proposal.
Substantiation: The explanation of negative votes by Committee members Mr. Jensen, Mr. Jones and Mr. Odhe are clear and to the point. There is no need for an additional cable category and there is no technical justification for this change.
See also my comment submitted on Proposal 16-37.
Panel Meeting Action: Accept
Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:
"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."
This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.
Number Eligible to Vote: 15
Ballot Results: Affirmative: 13 Abstain: 2
Comment on Affirmative:
OHDE: See my Affirmative Comment for Comment 16-34.
Explanation of Abstention:
DORNA: See my Explanation of Abstention for Comment 16-34.
KAHN: See my Explanation of Abstention on Comment 16-34.

16-453 Log #1457 NEC-P16 **Final Action: Reject**
(800.51)

Submitter: Technical Correlating Committee on Signaling Systems for the Protection of Life and Property
Comment on Proposal No: 16-112
Recommendation: Continue to accept in principle as published in the ROP.
Substantiation: The Signaling Systems for the Protection of Life and Property TCC supports the panel action. The panel action clarifies wiring requirements in air ducts and plenums.
Panel Meeting Action: Reject
Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:
"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."
This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.
Number Eligible to Vote: 15
Ballot Results: Affirmative: 13 Abstain: 2
Comment on Affirmative:
OHDE: See my Affirmative Comment for Comment 16-34.
Explanation of Abstention:
DORNA: See my Explanation of Abstention for Comment 16-34.
KAHN: See my Explanation of Abstention on Comment 16-34.

16-454 Log #1686 NEC-P16 **Final Action: Reject**
(800.51)

Submitter: Richard P. Owen, City of St. Paul, Minnesota
Comment on Proposal No: 16-112
Recommendation: Continue to Accept in Principle.
Substantiation: The Panel 3/Panel 16 Task Group, appointed by the NEC TCC, developed this comment.
The task group agrees with Panel 16's action and statement.
The NEC TCC Task Group on Correlation Issues Between Panels 3 and 16 met three times via teleconference calls. The assignment by the TCC Chairman was to attempt to develop a resolution and accompanying comments for the different actions taken on proposals dealing with similar issues by CMP 3 and CMP 16 for their respective Articles in Chapters 7 and 8 of the NEC.
The Task Group studied the issues and determined that there were five major differences in the actions on proposals concerning Articles 725, 760, 770, 800, 820, and 830. The voting on these issues was not unanimous but did pass as at least a simple majority of the Task Group.
One of the major differences involved installing air duct cables in a fabricated air duct without enclosing the cable in a metal raceway.
The Task Group members who attended the teleconference call voted to accept text that permits "air duct cable" to be installed in fabricated ducts without enclosing in an additional metal raceway or metal cable. The text to be accepted by Panel 3 is recommended to be similar to that found in Proposals 3-194 for Article 725 and 3-288 for Article 760. The "air duct cable" will replace the plenum cable that was previously acceptable in fabricated duct without enclosing in a metal raceway or metal cable assembly.
The following members of Panels 3 and 16 participated in this Task Group assignment: From Panel 3, Mr. Sanford E. Egesdal representing the Automatic Fire Alarm Association, Inc., Mr. Ronald E. Maassen representing the National Electrical Contractors Association, and Mr. Mark C. Ode representing Underwriters Laboratories Inc. From Panel 16, Mr. Robert W. Jensen representing the Building Industry Consulting Services International, Mr. Harold C. Ohde representing the International Brotherhood of Electrical Workers, and Mr. Joseph W. Rao representing the Independent Electrical Contractors, Inc. Mr. Richard P. Owen, the Chairman of CMP 3, representing the International Association of Electrical Inspectors, was the chairman of the Task Group.
Panel Meeting Action: Reject
Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:
"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."

This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.
Number Eligible to Vote: 15
Ballot Results: Affirmative: 13 Abstain: 2
Comment on Affirmative:
OHDE: See my Affirmative Comment for Comment 16-34.
Explanation of Abstention:
DORNA: See my Explanation of Abstention for Comment 16-34.
KAHN: See my Explanation of Abstention on Comment 16-34.

16-455 Log #1752 NEC-P16 **Final Action: Accept**
(800.51)

Note: See the Technical Correlating Committee Note on Comment 16-452.
Submitter: Michael I. Callanan, IBEW
Comment on Proposal No: 16-112
Recommendation: Reject this proposal.
Substantiation: This proposal should be rejected as we agree with the explanation of negative of Mr. Jensen, Mr. Jones, and Mr. Ohde. This comment represents the official position of the International Brotherhood of Electrical Workers Codes and Standards Committee.
Panel Meeting Action: Accept
Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:
"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."
This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.
Number Eligible to Vote: 15
Ballot Results: Affirmative: 13 Abstain: 2
Comment on Affirmative:
OHDE: See my Affirmative Comment for Comment 16-34.
Explanation of Abstention:
DORNA: See my Explanation of Abstention for Comment 16-34.
KAHN: See my Explanation of Abstention on Comment 16-34.

16-456 Log #1755 NEC-P16 **Final Action: Accept**
(800.51)

Submitter: Michael I. Callanan, IBEW
Comment on Proposal No: 16-115
Recommendation: Continue to reject.
Substantiation: I agree with the panel action to reject proposal 16-115. No technical substantiation has been provided that a change to the 2002 NEC language is needed or required. This comment represents the official position of the International Brotherhood of Electrical Workers Code and Standards Committee.
Panel Meeting Action: Accept
Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:
"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."
This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.
Number Eligible to Vote: 15
Ballot Results: Affirmative: 13 Abstain: 2
Comment on Affirmative:
OHDE: See my Affirmative Comment for Comment 16-34.
Explanation of Abstention:
DORNA: See my Explanation of Abstention for Comment 16-34.
KAHN: See my Explanation of Abstention on Comment 16-34.

16-457 Log #1765 NEC-P16 **Final Action: Accept**
(800.51)

Note: See the Technical Correlating Committee Note on Comment 16-452.
Submitter: Michael I. Callanan, IBEW
Comment on Proposal No: 16-125
Recommendation: Reject this proposal.
Substantiation: This proposal should be rejected as we agree with the explanation of negative of Mr. Jensen, Mr. Jones, and Mr. Ohde. This comment represents the official position of the International Brotherhood of Electrical Workers Codes and Standards Committee.
Panel Meeting Action: Accept
Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:
"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."
This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.
Number Eligible to Vote: 15
Ballot Results: Affirmative: 13 Abstain: 2
Comment on Affirmative:
OHDE: See my Affirmative Comment for Comment 16-34.
Explanation of Abstention:
DORNA: See my Explanation of Abstention for Comment 16-34.
KAHN: See my Explanation of Abstention on Comment 16-34.

16-458 Log #1771 NEC-P16 **Final Action: Accept**
(800.51)

Submitter: Richard P. Owen, City of St. Paul, Minnesota
Comment on Proposal No: 16-115
Recommendation: Continue to reject.
Substantiation: The Panel 3/Panel 16 Task Group, appointed by the NEC TCC, developed this comment.
The task group agrees with Panel 16's action and statement.
By accepting the majority of the suggested changes in a submitted comment for Proposal 3-94, "Other Spaces for Environmental Air" has been further subdivided into two separate spaces, ceiling cavity and raised floor plenums but the Panel still has maintained the electrical industry terminology associated with these spaces. Providing this further subdivision will enhance the usability of the NEC by making it easier to determine what other spaces are being referenced in this section. It will also improve correlation between the NEC and NFPA 90A.
The following members of Panels 3 and 16 participated in this Task Group assignment: From Panel 3, Mr. Sanford E. Egesdal representing the Automatic Fire Alarm Association, Inc., Mr. Ronald E. Maassen representing the National Electrical Contractors Association, and Mr. Mark C. Ode representing Underwriters Laboratories Inc. From Panel 16, Mr. Robert W. Jensen representing the Building Industry Consulting Services International, Mr. Harold C. Ohde representing the International Brotherhood of Electrical Workers, and Mr. Joseph W. Rao representing the Independent Electrical Contractors, Inc. Mr. Richard P. Owen, the Chairman of CMP 3, representing the International Association of Electrical Inspectors, was the chairman of the Task Group.
Panel Meeting Action: Accept
Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:
"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."
This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.
Number Eligible to Vote: 15
Ballot Results: Affirmative: 13 Abstain: 2
Comment on Affirmative:
OHDE: See my Affirmative Comment for Comment 16-34.
Explanation of Abstention:
DORNA: See my Explanation of Abstention for Comment 16-34.
KAHN: See my Explanation of Abstention on Comment 16-34.

16-459 Log #1845 NEC-P16 **Final Action: Reject**
(800.51)

Submitter: Thomas P. Hammerberg, Automatic Fire Alarm Association
Comment on Proposal No: 16-112
Recommendation: Continue to accept in principle as published in the ROP.
Substantiation: The Automatic Fire Alarm Association supports the panel action. The panel action clarifies wiring requirements in air ducts and plenums.
Panel Meeting Action: Reject
Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:
"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."
This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.
Number Eligible to Vote: 15
Ballot Results: Affirmative: 13 Abstain: 2
Comment on Affirmative:
OHDE: See my Affirmative Comment for Comment 16-34.
Explanation of Abstention:
DORNA: See my Explanation of Abstention for Comment 16-34.
KAHN: See my Explanation of Abstention on Comment 16-34.

16-460 Log #2220 NEC-P16 **Final Action: Accept**
(800.51)

Note: See the Technical Correlating Committee Note on Comment 16-452.
Submitter: T. David Mills, Bechtel Savannah River, Inc.
Comment on Proposal No: 16-125
Recommendation: Reject proposal in its entirety.
Substantiation:NFPA 90A - 2002 only places a restriction for cables and for testing per NFPA 262 for ceiling cavity plenums (4.3.10.2.6.1) and raised floor plenums (4.3.10.6.5.1). It does not state that these are the only places that this plenum rated cable can be used.
The other sections of NFPA 90A related to all other air spaces including "air ducts" are silent with respect to cable requirements. This indicates plenum rated cables can be placed anywhere in the air conditioning air handling system without any new "Duct" designator. There are not any other requirements in NFPA 90A to indicate anywhere that a "does not correlate" situation exists between NFPA 70 and NFPA 90A.There is no need for any additional environmental air space identifiers or cable type designators.
Panel Meeting Action: Accept
Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:
"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."
This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.
Number Eligible to Vote: 15
Ballot Results: Affirmative: 13 Abstain: 2
Comment on Affirmative:
OHDE: See my Affirmative Comment for Comment 16-34.
Explanation of Abstention:
DORNA: See my Explanation of Abstention for Comment 16-34.
KAHN: See my Explanation of Abstention on Comment 16-34.

16-461 Log #2237 NEC-P16 **Final Action: Accept**
(800.51)

Note: See the Technical Correlating Committee Note on Comment 16-452.
Submitter: T. David Mills, Bechtel Savannah River, Inc.
Comment on Proposal No: 16-112
Recommendation: Reject proposal in its entirety.
Substantiation:NFPA 90A - 2002 only places a restriction for cables and for testing per NFPA 262 for ceiling cavity plenums (4.3.10.2.6.1) and raised floor plenums (4.3.10.6.5.1). It does not state that these are the only places that this plenum rated cable can be used.
The other sections of NFPA 90A related to all other air spaces including "air ducts" are silent with respect to cable requirements. This indicates plenum rated cables can be placed anywhere in the air conditioning air handling system without any new "Duct" designator. There are not any other requirements in NFPA 90A to indicate anywhere that a "does not correlate" situation exists between NFPA 70 and NFPA 90A.There is no need for any additional environmental air space identifiers or cable type designators.
Panel Meeting Action: Accept
Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:
"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."
This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.
Number Eligible to Vote: 15
Ballot Results: Affirmative: 13 Abstain: 2
Comment on Affirmative:
OHDE: See my Affirmative Comment for Comment 16-34.
Explanation of Abstention:
DORNA: See my Explanation of Abstention for Comment 16-34.
KAHN: See my Explanation of Abstention on Comment 16-34.

16-462 Log #2265 NEC-P16 **Final Action: Accept**
(800.51)

Note: See the Technical Correlating Committee Note on Comment 16-452.
Submitter: Frank Bisbee, Communication Planning Corporation
Comment on Proposal No: 16-125
Recommendation: Reject this proposal.
Substantiation: In recognizing the use of "duct cable" or "limited combustible cable," the proposal fails to consider toxicity of the newly specified product and the relative incapacitation factor presented by the chemical constituents of the polymer in new cable design. A recent study by the NFPA Fire Protection Research Foundation has advanced an international effort to make certain that people can escape a burning building before being incapacitated (overcome by smoke or gases generated by thermal decomposition). The work is part of a revolution in fire safety in which codes and standards are beginning to address how much smoke, or gases generated by thermal decomposition, will incapacitate people, rather than how much will kill them.
The jacketing and insulating materials used in duct cable and limited combustible cable are subject to heat decomposition and the emission of sub-lethal toxic fumes. Some of these fumes can incapacitate (blinding and choking) the building occupants. The requirements for using "duct cable" have failed to recognize toxicity or emissions that are essentially colorless (i.e. hydrogen fluoride, which converts to hydrofluoric acid upon contact with any moisture, and other toxic gases may be generated).
In 2002, the ISO (International Organization for Standardization), a network of the industrial-standards institutes of 147 countries, put forth a new standard calling for attention to the "sub-lethal" effects of smoke - when the heat, the thickness of smoke, and the toxic gases in smoke will block vision, make a person choke or tear up, or render a person unconscious. Because of this new ISO standard, these effects of smoke are supposed to be taken into account when regulating the size and placement of exits and the types of materials allowed in buildings. But to meet the standard, one needs to know more about the smoke produced by burning various materials. Working with the National Institute of Standards and Technology, the FPRF is laying the scientific groundwork needed to put the new standard into practice. The foundation recently completed the project's second phase of its International study of the Sub-lethal Effects of Fire Smoke on Survivability and Health. In the most recent phase of the study, the foundation's researchers performed three tests: They burned a sofa made of upholstered cushions on a steel frame, some particle board bookcases, and some household cable. In each case, the materials were burned in a room with a long adjacent corridor. The researchers measured the toxic gases emitted by each item, and how quickly the gases filled the room and moved down the corridor. They determined when and where in the room and in the hallway people would have to stop because of the smoke or the heat. Fire-test laboratories and manufacturers are expected to use this data to develop smaller-scale tests that can be done in a laboratory, so they won't need to set a room on fire every time they test a product. FPRF is uniquely equipped to conduct such studies, and NFPA officials expect more lives to be saved because of the new fire-safety standards that will emerge from this work.

By allowing and specifying the use of "duct cable," this proposal supports the use of materials counter to the findings already available in the public domain regarding sub-lethal toxicity of hydrogen fluoride and through the NFPA Fire Protection Research Foundation regarding incapacitation factors. Polymers used in duct cable and other limited combustible cable materials far exceed the incapacitation factor of other materials used in various cable construction both in generation of sub-lethal constituents and in hypertoxicity.

Panel Meeting Action: Accept

Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:

"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."

This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.

Number Eligible to Vote: 15

Ballot Results: Affirmative: 13 Abstain: 2

Comment on Affirmative:

OHDE: See my Affirmative Comment for Comment 16-34.

Explanation of Abstention:

DORNA: See my Explanation of Abstention for Comment 16-34.

KAHN: See my Explanation of Abstention on Comment 16-34.

16-463 Log #2317 NEC-P16 **Final Action: Accept**
(800.51)

Note: See the Technical Correlating Committee Note on Comment 16-452.

Submitter: Frank Bisbee, Communication Planning Corporation

Comment on Proposal No: 16-112

Recommendation: Reject this proposal.

Substantiation: In recognizing the use of "duct cable" or "limited combustible cable," the proposal fails to consider toxicity of the newly specified product and the relative incapacitation factor presented by the chemical constituents of the polymer in new cable design. A recent study by the NFPA Fire Protection Research Foundation has advanced an international effort to make certain that people can escape a burning building before being incapacitated (overcome by smoke or gases generated by thermal decomposition). The work is part of a revolution in fire safety in which codes and standards are beginning to address how much smoke, or gases generated by thermal decomposition, will incapacitate people, rather than how much will kill them.

The jacketing and insulating materials used in duct cable and limited combustible cable are subject to heat decomposition and the emission of sub-lethal toxic fumes. Some of these fumes can incapacitate (blinding and choking) the building occupants. The requirements for using "duct cable" have failed to recognize toxicity or emissions that are essentially colorless (i.e. hydrogen fluoride, which converts to hydrofluoric acid upon contact with any moisture, and other toxic gases may be generated).

In 2002, the ISO (International Organization for Standardization), a network of the industrial-standards institutes of 147 countries, put forth a new standard calling for attention to the "sub-lethal" effects of smoke - when the heat, the thickness of smoke, and the toxic gases in smoke will block vision, make a person choke or tear up, or render a person unconscious. Because of this new ISO standard, these effects of smoke are supposed to be taken into account when regulating the size and placement of exits and the types of materials allowed in buildings. But to meet the standard, one needs to know more about the smoke produced by burning various materials. Working with the National Institute of Standards and Technology, the FPRF is laying the scientific groundwork needed to put the new standard into practice. The foundation recently completed the project's second phase of its International study of the Sub-lethal Effects of Fire Smoke on Survivability and Health. In the most recent phase of the study, the foundation's researchers performed three tests: They burned a sofa made of upholstered cushions on a steel frame, some particle board bookcases, and some household cable. In each case, the materials were burned in a room with a long adjacent corridor. The researchers measured the toxic gases emitted by each item, and how quickly the gases filled the room and moved down the corridor. They determined when and where in the room and in the hallway people would have to stop because of the smoke or the heat. Fire-test laboratories and manufacturers are expected to use this data to develop smaller-scale tests that can be done in a laboratory, so they won't need to set a room on fire every time they test a product. FPRF is uniquely equipped to conduct such studies, and NFPA officials expect more lives to be saved because of the new fire-safety standards that will emerge from this work.

By allowing and specifying the use of "duct cable," this proposal supports the use of materials counter to the findings already available in the public domain regarding sub-lethal toxicity of hydrogen fluoride and through the NFPA Fire Protection Research Foundation regarding incapacitation factors. Polymers used in duct cable and other limited combustible cable materials far exceed the incapacitation factor of other materials used in various cable construction both in generation of sub-lethal constituents and in hypertoxicity.

Panel Meeting Action: Accept

Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:

"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."

This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.

Number Eligible to Vote: 15

Ballot Results: Affirmative: 13 Abstain: 2

Comment on Affirmative:

OHDE: See my Affirmative Comment for Comment 16-34.

Explanation of Abstention:

DORNA: See my Explanation of Abstention for Comment 16-34.

KAHN: See my Explanation of Abstention on Comment 16-34.

16-464 Log #2452 NEC-P16 **Final Action: Accept**
(800.51)

Note: See the Technical Correlating Committee Note on Comment 16-452.

Submitter: William A. Wolfe, Steel Tube Institute of North America

Comment on Proposal No: 16-112

Recommendation: Reject this proposal.

Substantiation: See our companion proposal on 16-37.

Panel Meeting Action: Accept

Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:

"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."

This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.

Number Eligible to Vote: 15

Ballot Results: Affirmative: 13 Abstain: 2

Comment on Affirmative:

OHDE: See my Affirmative Comment for Comment 16-34.

Explanation of Abstention:

DORNA: See my Explanation of Abstention for Comment 16-34.

KAHN: See my Explanation of Abstention on Comment 16-34.

16-465 Log #2484 NEC-P16 **Final Action: Accept**
(800.51)

Note: See the Technical Correlating Committee Note on Comment 16-452.

Submitter: William A. Wolfe, Steel Tube Institute of North America

Comment on Proposal No: 16-125

Recommendation: Reject this proposal.

Substantiation: See our companion proposal on 16-37.

Panel Meeting Action: Accept

Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:

"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."

This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.

Number Eligible to Vote: 15

Ballot Results: Affirmative: 13 Abstain: 2

Comment on Affirmative:
OHDE: See my Affirmative Comment for Comment 16-34.
Explanation of Abstention:
DORNA: See my Explanation of Abstention for Comment 16-34.
KAHN: See my Explanation of Abstention on Comment 16-34.

16-466 Log #2486 NEC-P16 **Final Action: Accept**
(800.51)

Note: See the Technical Correlating Committee Note on Comment 16-452.
Submitter: William A. Wolfe, Steel Tube Institute of North America
Comment on Proposal No: 16-126
Recommendation: Reject this proposal.
Substantiation: See our companion proposal on 16-37.
Panel Meeting Action: Accept
Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:
"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."
This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.
Number Eligible to Vote: 15
Ballot Results: Affirmative: 13 Abstain: 2
Comment on Affirmative:
OHDE: See my Affirmative Comment for Comment 16-34.
Explanation of Abstention:
DORNA: See my Explanation of Abstention for Comment 16-34.
KAHN: See my Explanation of Abstention on Comment 16-34.

16-467 Log #2733 NEC-P16 **Final Action: Reject**
(800.51)

Submitter: Richard Fransen, Daikin America, Inc. / Rep. Cable Fire Research Association
Comment on Proposal No: 16-112
Recommendation: Continue to accept this proposal in principle.
Substantiation: CFRA agrees with the panel action.
Panel Meeting Action: Reject
Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:
"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."
This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.
Number Eligible to Vote: 15
Ballot Results: Affirmative: 13 Abstain: 2
Comment on Affirmative:
OHDE: See my Affirmative Comment for Comment 16-34.
Explanation of Abstention:
DORNA: See my Explanation of Abstention for Comment 16-34.
KAHN: See my Explanation of Abstention on Comment 16-34.

16-468 Log #2738 NEC-P16 **Final Action: Accept**
(800.51)

Submitter: Richard Fransen, Daikin America, Inc. / Rep. Cable Fire Research Association
Comment on Proposal No: 16-115
Recommendation: Continue to reject this proposal.
Substantiation: CFRA agrees with the panel action.
Panel Meeting Action: Accept
Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:
"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."
This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.
Number Eligible to Vote: 15
Ballot Results: Affirmative: 13 Abstain: 2
Comment on Affirmative:
OHDE: See my Affirmative Comment for Comment 16-34.
Explanation of Abstention:
DORNA: See my Explanation of Abstention for Comment 16-34.
KAHN: See my Explanation of Abstention on Comment 16-34.

16-469 Log #2747 NEC-P16 **Final Action: Reject**
(800.51)

Submitter: Richard Fransen, Daikin America, Inc. / Rep. Cable Fire Research Association
Comment on Proposal No: 16-125
Recommendation: Continue to accept this proposal in principle.
Substantiation: See the comment from CFRA on proposal 16-112.
Panel Meeting Action: Reject
Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:
"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."
This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.
Number Eligible to Vote: 15
Ballot Results: Affirmative: 13 Abstain: 2
Comment on Affirmative:
OHDE: See my Affirmative Comment for Comment 16-34.
Explanation of Abstention:
DORNA: See my Explanation of Abstention for Comment 16-34.
KAHN: See my Explanation of Abstention on Comment 16-34.

16-470 Log #2748 NEC-P16 **Final Action: Reject**
(800.51)

Submitter: Richard Fransen, Daikin America, Inc. / Rep. Cable Fire Research Association
Comment on Proposal No: 16-126
Recommendation: Continue to accept this proposal in principle.
Substantiation: See the comment from CFRA on proposal 16-112.
Panel Meeting Action: Reject
Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:
"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."
This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.
Number Eligible to Vote: 15
Ballot Results: Affirmative: 13 Abstain: 2
Comment on Affirmative:
OHDE: See my Affirmative Comment for Comment 16-34.
Explanation of Abstention:
DORNA: See my Explanation of Abstention for Comment 16-34.
KAHN: See my Explanation of Abstention on Comment 16-34.

16-471 Log #2826 NEC-P16 **Final Action: Reject**
(800.51)

Submitter: Richard P. Owen, City of St. Paul, Minnesota
Comment on Proposal No: 16-125
Recommendation: Continue to accept in principle.
Substantiation: The Panel 3/Panel 16 Task Group, appointed by the NEC TCC, developed this comment.

The task group agrees with Panel 16's action and statement.

The NEC TCC Task Group on Correlation Issues Between Panels 3 and 16 met three times via teleconference calls. The assignment by the TCC Chairman was to attempt to develop a resolution and accompanying comments for the different actions taken on proposals dealing with similar issues by CMP 3 and CMP 16 for their respective Articles in Chapters 7 and 8 of the NEC.

The Task Group studied the issues and determined that there were five major differences in the actions on proposals concerning Articles 725, 760, 770, 800, 820, and 830. The voting on these issues was not unanimous but did pass as at least a simple majority of the Task Group.

One of the major differences involved installing air duct cables in a fabricated air duct without enclosing the cable in a metal raceway.

The Task Group members who attended the teleconference call voted to accept text that permits "air duct cable" to be installed in fabricated ducts without enclosing in an additional metal raceway or metal cable. The text to be accepted by Panel 3 is recommended to be similar to that found in Proposals 3-194 for Article 725 and 3-288 for Article 760. The "air duct cable" will replace the plenum cable that was previously acceptable in fabricated duct without enclosing in a metal raceway or metal cable assembly.

The following members of Panels 3 and 16 participated in this Task Group assignment: From Panel 3, Mr. Sanford E. Egesdal representing the Automatic Fire Alarm Association, Inc., Mr. Ronald E. Maassen representing the National Electrical Contractors Association, and Mr. Mark C. Ode representing Underwriters Laboratories Inc. From Panel 16, Mr. Robert W. Jensen representing the Building Industry Consulting Services International, Mr. Harold C. Ohde representing the International Brotherhood of Electrical Workers, and Mr. Joseph W. Rao representing the Independent Electrical Contractors, Inc. Mr. Richard P. Owen, the Chairman of CMP 3, representing the International Association of Electrical Inspectors, was the chairman of the Task Group.

Panel Meeting Action: Reject
Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:

"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."

This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.
Number Eligible to Vote: 15
Ballot Results: Affirmative: 13 Abstain: 2
Comment on Affirmative:
OHDE: See my Affirmative Comment for Comment 16-34.
Explanation of Abstention:
DORNA: See my Explanation of Abstention for Comment 16-34.
KAHN: See my Explanation of Abstention on Comment 16-34.

16-472 Log #2827 NEC-P16 **Final Action: Reject**
(800.51)

Submitter: Richard P. Owen, City of St. Paul, Minnesota
Comment on Proposal No: 16-126
Recommendation: Continue to accept in principle.
Substantiation: The Panel 3/Panel 16 Task Group, appointed by the NEC TCC, developed this comment.

The task group agrees with Panel 16's action and statement.

The NEC TCC Task Group on Correlation Issues Between Panels 3 and 16 met three times via teleconference calls. The assignment by the TCC Chairman was to attempt to develop a resolution and accompanying comments for the different actions taken on proposals dealing with similar issues by CMP 3 and CMP 16 for their respective Articles in Chapters 7 and 8 of the NEC.

The Task Group studied the issues and determined that there were five major differences in the actions on proposals concerning Articles 725, 760, 770, 800, 820, and 830. The voting on these issues was not unanimous but did pass as at least a simple majority of the Task Group.

One of the major differences involved installing air duct cables in a fabricated air duct without enclosing the cable in a metal raceway.

The Task Group members who attended the teleconference call voted to accept text that permits "air duct cable" to be installed in fabricated ducts without enclosing in an additional metal raceway or metal cable. The text to be accepted by Panel 3 is recommended to be similar to that found in Proposals 3-194 for Article 725 and 3-288 for Article 760. The "air duct cable" will replace the plenum cable that was previously acceptable in fabricated duct without enclosing in a metal raceway or metal cable assembly.

The following members of Panels 3 and 16 participated in this Task Group assignment: From Panel 3, Mr. Sanford E. Egesdal representing the Automatic Fire Alarm Association, Inc., Mr. Ronald E. Maassen representing the National Electrical Contractors Association, and Mr. Mark C. Ode representing Underwriters Laboratories Inc. From Panel 16, Mr. Robert W. Jensen representing the Building Industry Consulting Services International, Mr. Harold C. Ohde representing the International Brotherhood of Electrical Workers, and Mr. Joseph W. Rao representing the Independent Electrical Contractors, Inc. Mr. Richard P. Owen, the Chairman of CMP 3, representing the International Association of Electrical Inspectors, was the chairman of the Task Group.

Panel Meeting Action: Reject
Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:

"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."

This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.
Number Eligible to Vote: 15
Ballot Results: Affirmative: 13 Abstain: 2
Comment on Affirmative:
OHDE: See my Affirmative Comment for Comment 16-34.
Explanation of Abstention:
DORNA: See my Explanation of Abstention for Comment 16-34.
KAHN: See my Explanation of Abstention on Comment 16-34.

16-473 Log #2518ii NEC-P16 **Final Action: Accept**
(800.51)

Note: See the Technical Correlating Committee Note on Comment 16-452.
Submitter: Vince Baclawski, National Electrical Manufacturers Association (NEMA)
Comment on Proposal No: 16-112
Recommendation: Reject this proposal.
Substantiation: See our companion comment on Proposal 1-69.
Panel Meeting Action: Accept
Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:

"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."

This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.
Number Eligible to Vote: 15
Ballot Results: Affirmative: 13 Abstain: 2
Comment on Affirmative:
OHDE: See my Affirmative Comment for Comment 16-34.
Explanation of Abstention:
DORNA: See my Explanation of Abstention for Comment 16-34.
KAHN: See my Explanation of Abstention on Comment 16-34.

16-474 Log #2518xxx NEC-P16 **Final Action: Accept**
(800.51)

Note: See the Technical Correlating Committee Note on Comment 16-452.
Submitter: Vince Baclawski, National Electrical Manufacturers Association (NEMA)
Comment on Proposal No: 16-125
Recommendation: Reject this proposal.
Substantiation: See our companion comment on Proposal 1-69.
Panel Meeting Action: Accept

Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:

"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."

This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.

Number Eligible to Vote: 15
Ballot Results: Affirmative: 13 Abstain: 2
Comment on Affirmative:
OHDE: See my Affirmative Comment for Comment 16-34.
Explanation of Abstention:
DORNA: See my Explanation of Abstention for Comment 16-34.
KAHN: See my Explanation of Abstention on Comment 16-34.

16-475 Log #2518lll NEC-P16 **Final Action: Accept**
(800.51)

Note: See the Technical Correlating Committee Note on Comment 16-452.
Submitter: Vince Baclawski, National Electrical Manufacturers Association (NEMA)
Comment on Proposal No: 16-126
Recommendation: Reject this proposal.
Substantiation: See our companion comment on Proposal 1-69.
Panel Meeting Action: Accept
Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:

"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."

This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.

Number Eligible to Vote: 15
Ballot Results: Affirmative: 13 Abstain: 2
Comment on Affirmative:
OHDE: See my Affirmative Comment for Comment 16-34.
Explanation of Abstention:
DORNA: See my Explanation of Abstention for Comment 16-34.
KAHN: See my Explanation of Abstention on Comment 16-34.

16-476 Log #3712 NEC-P16 **Final Action: Accept**
(800.51)

Submitter: Marcelo M. Hirschler, GBH International / Rep. Fire Retardant Chemicals Association
Comment on Proposal No: 16-115
Recommendation: Continue rejecting this proposal and make no changes in the terminology of plenum spaces or of "other spaces used for environmental air".
Substantiation: The terminology in NEC 2002 is correct and needs no change. See also the substantiation for my comments on proposal 16-59.
Panel Meeting Action: Accept
Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:

"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."

This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.

Number Eligible to Vote: 15
Ballot Results: Affirmative: 13 Abstain: 2
Comment on Affirmative:
OHDE: See my Affirmative Comment for Comment 16-34.
Explanation of Abstention:
DORNA: See my Explanation of Abstention for Comment 16-34.
KAHN: See my Explanation of Abstention on Comment 16-34.

16-477 Log #3785 NEC-P16 **Final Action: Accept**
(800.51)

Note: See the Technical Correlating Committee Note on Comment 16-452.
Submitter: Marcelo M. Hirschler, GBH International / Rep. Fire Retardant Chemicals Association
Comment on Proposal No: 16-112
Recommendation: *Reject this proposal - Also reject the references to NFPA 90A in fine print notes and the creation of the new category of air duct cables and the subdivision of plenums. Revise the FPN to 800.51 as follows, and make no other changes.*

~~FPN: One method of defining low smoke-producing cables is by establishing an acceptable value of the smoke produced when tested in accordance with NFPA 262-1999, Standard Method of Test for Flame Travel and Smoke of Wires and Cables for Use in Air-Handling Spaces, to a maximum peak optical density of 0.5 and a maximum average optical density of 0.15. Similarly, one method of defining fire-resistant cables is by defining maximum allowable flame travel distance of 1.52 m (5 ft) when tested in accordance with the same test.~~

FPN: One method of defining a cable that is low smoke-producing cable and fire-resistant cable is that the cable exhibits a maximum peak optical density of 0.5 or less, an average optical density of 0.15 or less, and a maximum flame spread distance of 1.52 m (5 ft) or less when tested in accordance with NFPA 262, Standard Method of Test for Flame Travel and Smoke of Wires and Cables for Use in Air-Handling Spaces.

Substantiation: There is no need for a new category of CMD cables. There is also no justification for limiting the use of traditional plenum cables. It has become clear now that the expertise needed for choosing the type of wiring systems permitted in any space should be the prerogative of the NEC, which (through its various panels and its Technical Correlating Committee) has greater expertise and a broader view than the Technical Committee on Air Conditioning (responsible for NFPA 90A). Therefore, the NEC panels should continue making their own choices regarding wiring methods. The issue of correlation (or even reference) to either NFPA 90A or the categories of plenums used in NFPA 90A should be rejected by CMP 16.

This proposal should be rejected because, as stated by Mr. Paul Casparro in his negative on proposal 3-169, the NEC is not a product catalog nor is it a design manual and is not intended to contain an all-inclusive list of permitted products. CMP 3, appropriately, did not develop any applications where "duct cable" or "air duct cable" is required instead of plenum cable.

Also, as stated by Mr. Harold Ohde in his negative on similar proposal 16-37: "Further the NEC already adequately covers wiring in spaces that provide environmental air — whether these spaces are air ducts, air conditioning rooms, ceiling cavities, or raised floor cavities — in 300.22 (B) and 300.22 (C). Other codes should not be deciding on the types of wiring methods to be used in these spaces. The electrical experts are capable of doing this, and it is covered quite well in 300.22. The more we let those outside of the NEC make these decisions the more we weaken adoption of the NEC. Also, we could make the change and there is nothing that requires a jurisdiction to even adopt 90A. In addition, we do not find that the 90A Committee has even determined itself what minimum requirements are needed for testing electrical wiring. According to one of the speakers, 90A agreed to the proposals for coordination, but did not originate the proposals that introduce the new "air duct" cable. This appears to be an effort designed to purport on one hand that this is what 90A wants; then when they take it to 90A this summer it will be presented as a "done deal" at the NEC. There is far from consensus among the NEC committees and Panel 16 appears to be the strongest proponents."

If this proposal were approved, it would create a new category of cable, CMD, which are simply a subset of the present category of plenum-rated cable (CMP) (since all cables listed to UL 2424-2002 have to meet the fire safety, mechanical and electrical requirements of traditional plenum cable), while limiting the application of the latter (traditional plenum-rated cable) without any justification based on fire hazard or fire risk. It has already been shown in detail by the fire hazard and fire risk analysis presented together with my original proposals (see for example the section on pages 2080-2091 of the NEC-ROP of the substantiation for my proposal 3-130) that there is no need to change the requirements, or limit the application, for wiring methods in plenums, because the fire safety record is excellent.

In fact, if CMP cables, i.e. traditional plenum cables meeting the requirements of NFPA 262, are to be limited in application, then cables contained in metal raceways must also be limited in application, since the work that led to the development of the requirements for plenum rated cables showed that they generate more smoke and flame spread than plenum cables meeting NFPA 262, as is clear from the following Table, containing data from the work conducted to justify the development of NFPA 262 (originally UL 910). All 11 plenum-rated cables had flame spread values not exceeding 5 ft and average optical densities not exceeding 0.15 and 10 of the 11 plenum-rated cables had peak optical densities not exceeding 0.50. On the other hand, 5 of the 17 cables

Comment 16-477 (Log #3785)

Table 1. Flame Spread and Optical Density of Wiring Systems

Cable	Metal Raceway	Flame Spread (ft)	Peak Optical Density	Average Optical Density
Plenum Rated Coaxial Cable	None	3.0	0.12	0.015
Plenum Rated Coaxial Cable	None	3.0	0.25	0.067
Plenum Rated Coaxial Cable	None	3.0	0.45	0.13
Plenum Rated Coaxial Cable	None	3.0	0.60	0.15
Plenum Rated Fire Alarm Cable	None	3.0	0.10	0.028
Plenum Rated Fire Alarm Cable	None	3.0	0.15	0.043
Plenum Rated Inside Wiring	None	3.0	0.35	0.121
Plenum Rated Inside wiring	None	3.0	0.25	0.047
Plenum Rated Station Wire	None	3.5	0.08	0.069
Plenum Rated Station Wire	None	3.5	0.07	-
Plenum Rated Station Wire	None	3.5	0.08	-
Plenum Cable NFPA 262 Limits	None	5.0	0.50	0.15
Coaxial Cable	Steel EMT	7.0	1.85	0.37
Coaxial Cable	Steel EMT	4.5	1.00	0.11
Fire Alarm Cable	Steel EMT	4.0	0.70	0.17
Fire Alarm Cable	Steel EMT	3.5	0.50	0.09
Inside Wiring	Steel EMT	2.5	0.14	0.069
Inside Wiring	Steel EMT	2.5	0.38	0.094
Inside Wiring	Flexible Steel	2.0	0.06	0.008
Inside Wiring	Flexible Steel	2.0	0.04	0.005
Inside Wiring	Rigid Aluminum	2.0	0.20	0.045
Inside Wiring	Flexible Aluminum	2.5	0.56	0.084
Inside Wiring	Flexible Aluminum	2.5	0.31	0.051
Station Wire	Flexible Aluminum	3.5	0.85	0.222
Station Wire	Flexible Aluminum	3.5	0.66	0.157
Fire Alarm Cable	Flexible Aluminum	6.0	0.60	0.22
Fire Alarm Cable	Flexible Aluminum	5.5	1.20	0.19
Coaxial Cable	Flexible Aluminum	13.5	1.85	0.45
Coaxial Cable	Flexible Aluminum	19.5	2.15	0.32

in metal raceways tested had flame spread values exceeding 5 ft, 8 of the 17 cables in metal raceways tested had average optical densities exceeding 0.15 and 10 of the 17 cables in metal raceways tested had peak optical densities exceeding 0.50. This comment recognizes that cables in metal raceways are safe wiring methods for plenums. Therefore traditional plenum cables are also safe and suitable.

Furthermore, any reference to NFPA 90A is not appropriate in a Fine Print Note on fire safety characteristics of wiring methods, since NFPA 90A is not a suitable standard for testing or listing wiring methods. The logical way to have a fine print note is to reference the standard used for testing the fire safety of the materials, which in this case is a combination of NFPA 255 and NFPA 259, or the UL Subject 2424 that contains all the listing requirements.

This comment is one of a series of comments on Articles 300, 725, 760, 770, 800, 820 and 830, regarding "plenum cables". The philosophy behind all the comments is that the NEC is OK as published in 2002, but that 2 minor changes might represent improvements: (i) the clarification of the 6 inch extension of a wiring method into a more restricted environment and (ii) the clarification in the Fine Print Notes that a cable listed to NFPA 262 is listed both based on its "low-smoke" characteristics and its "low-flame-spread" characteristics, and that the two are not listed separately.

Also see comments from the chairman of the Technical Correlating Committee.

Panel Meeting Action: Accept

Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:

"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."

This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.

Number Eligible to Vote: 15

Ballot Results: Affirmative: 13 Abstain: 2

Comment on Affirmative:

OHDE: See my Affirmative Comment for Comment 16-34.

Explanation of Abstention:

DORNA: See my Explanation of Abstention for Comment 16-34.

KAHN: See my Explanation of Abstention on Comment 16-34.

16-478 Log #3801 NEC-P16 **Final Action: Accept**
(800.51)

Note: See the Technical Correlating Committee Note on Comment 16-452.

Submitter: Marcelo M. Hirschler, GBH International / Rep. Fire Retardant Chemicals Association

Comment on Proposal No: 16-125

Recommendation: *Reject this proposal - Also reject the references to NFPA 90A in fine print notes and the creation of the new category of air duct cables and the subdivision of plenums. Revise the FPN to 800.51 as follows, and make no other changes.*

~~FPN: One method of defining low smoke-producing cables is by establishing an acceptable value of the smoke produced when tested in accordance with NFPA 262-1999, Standard Method of Test for Flame Travel and Smoke of Wires and Cables for Use in Air-Handling Spaces, to a maximum peak optical density of 0.5 and a maximum average optical density of 0.15. Similarly, one method of defining fire-resistant cables is by defining maximum allowable flame travel distance of 1.52 m (5 ft) when tested in accordance with the same test.~~

FPN: One method of defining a cable that is low smoke-producing cable and fire-resistant cable is that the cable exhibits a maximum peak optical density of 0.5 or less, an average optical density of 0.15 or less, and a maximum flame spread distance of 1.52 m (5 ft) or less when tested in accordance with NFPA 262, Standard Method of Test for Flame Travel and Smoke of Wires and Cables for Use in Air-Handling Spaces.

Substantiation: There is no need for a new category of CMD cables. There is also no justification for limiting the use of traditional plenum cables. It has become clear now that the expertise needed for choosing the type of wiring systems permitted in any space should be the prerogative of the NEC, which (through its various panels and its Technical Correlating Committee) has greater expertise and a broader view than the Technical Committee on Air Conditioning (responsible for NFPA 90A). Therefore, the NEC panels should continue making their own choices regarding wiring methods. The issue of correlation (or even reference) to either NFPA 90A or the categories of plenums used in NFPA 90A should be rejected by CMP 16.

Furthermore, the reference to NFPA 90A is not appropriate in the Fine Print Note, since NFPA 90A is not a suitable standard for testing or listing wiring methods. The logical way to have a fine print note is to reference the standard used for testing the fire safety of the materials, which in this case is a combination of NFPA 255 and NFPA 259, or the UL Subject 2424 that contains all the listing requirements.

See further information in the comment I made to recommend rejection of proposal 16-112.

Panel Meeting Action: Accept

Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:

"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."

This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.

Number Eligible to Vote: 15

Ballot Results: Affirmative: 13 Abstain: 2

Comment on Affirmative:

OHDE: See my Affirmative Comment for Comment 16-34.

Explanation of Abstention:

DORNA: See my Explanation of Abstention for Comment 16-34.

KAHN: See my Explanation of Abstention on Comment 16-34.

16-479 Log #2471 NEC-P16 **Final Action: Accept**
(800.51, 800-53(A) ,Table 800-50 and Table 800-53)

Note: See the Technical Correlating Committee Note on Comment 16-452.

Submitter: William A. Wolfe, Steel Tube Institute of North America

Comment on Proposal No: 16-121

Recommendation: Reject this proposal.

Substantiation: See our companion proposal on 16-37.

Panel Meeting Action: Accept

Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:

"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."

This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.

Number Eligible to Vote: 15

Ballot Results: Affirmative: 13 Abstain: 2

Comment on Affirmative:

OHDE: See my Affirmative Comment for Comment 16-34.

Explanation of Abstention:

DORNA: See my Explanation of Abstention for Comment 16-34.

KAHN: See my Explanation of Abstention on Comment 16-34.

16-480 Log #2793 NEC-P16 **Final Action: Reject**
(800.51, 800-53(A), Table 800-50 and Table 800-53)

Submitter: Richard P. Owen, City of St. Paul, Minnesota

Comment on Proposal No: 16-121

Recommendation: Continue to accept in principle.

Substantiation: The Panel 3/Panel 16 Task Group, appointed by the NEC TCC, developed this comment.

The task group agrees with Panel 16's action and statement.

The NEC TCC Task Group on Correlation Issues Between Panels 3 and 16 met three times via teleconference calls. The assignment by the TCC Chairman was to attempt to develop a resolution and accompanying comments for the different actions taken on proposals dealing with similar issues by CMP 3 and CMP 16 for their respective Articles in Chapters 7 and 8 of the NEC.

The Task Group studied the issues and determined that there were five major differences in the actions on proposals concerning Articles 725, 760, 770, 800, 820, and 830. The voting on these issues was not unanimous but did pass as at least a simple majority of the Task Group.

One of the major differences involved installing air duct cables in a fabricated air duct without enclosing the cable in a metal raceway.

The Task Group members who attended the teleconference call voted to accept text that permits "air duct cable" to be installed in fabricated ducts without enclosing in an additional metal raceway or metal cable. The text to be accepted by Panel 3 is recommended to be similar to that found in Proposals 3-194 for Article 725 and 3-288 for Article 760. The "air duct cable" will replace the plenum cable that was previously acceptable in fabricated duct without enclosing in a metal raceway or metal cable assembly.

The following members of Panels 3 and 16 participated in this Task Group assignment: From Panel 3, Mr. Sanford E. Egesdal representing the Automatic Fire Alarm Association, Inc., Mr. Ronald E. Maassen representing the National Electrical Contractors Association, and Mr. Mark C. Ode representing Underwriters Laboratories Inc. From Panel 16, Mr. Robert W. Jensen representing the Building Industry Consulting Services International, Mr. Harold C. Ohde representing the International Brotherhood of Electrical Workers, and Mr. Joseph W. Rao representing the Independent Electrical Contractors, Inc. Mr. Richard P. Owen, the Chairman of CMP 3, representing the International Association of Electrical Inspectors, was the chairman of the Task Group.

Panel Meeting Action: Reject

Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:

"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."

This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.

Number Eligible to Vote: 15

Ballot Results: Affirmative: 13 Abstain: 2

Comment on Affirmative:

OHDE: See my Affirmative Comment for Comment 16-34.

Explanation of Abstention:

DORNA: See my Explanation of Abstention for Comment 16-34.

KAHN: See my Explanation of Abstention on Comment 16-34.

16-481 Log #2454 NEC-P16 **Final Action: Accept**
(800.51, 800-53, Figure 800-53 and Table 800-50)

Note: See the Technical Correlating Committee Note on Comment 16-452.

Submitter: William A. Wolfe, Steel Tube Institute of North America

Comment on Proposal No: 16-113

Recommendation: Reject this proposal.

Substantiation: See our companion proposal on 16-37.

Panel Meeting Action: Accept

Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:

"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."

This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.

Number Eligible to Vote: 15

Ballot Results: Affirmative: 13 Abstain: 2

Comment on Affirmative:

OHDE: See my Affirmative Comment for Comment 16-34.

Explanation of Abstention:

DORNA: See my Explanation of Abstention for Comment 16-34.

KAHN: See my Explanation of Abstention on Comment 16-34.

16-482 Log #2455 NEC-P16 **Final Action: Accept**
(800.51, 800-53, Figure 800-53 and Table 800-50)

Note: See the Technical Correlating Committee Note on Comment 16-452.

Submitter: William A. Wolfe, Steel Tube Institute of North America

Comment on Proposal No: 16-114

Recommendation: Reject this proposal.

Substantiation: See our companion proposal on 16-37.

Panel Meeting Action: Accept

Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:

"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."

This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.

Number Eligible to Vote: 15

Ballot Results: Affirmative: 13 Abstain: 2

Comment on Affirmative:

OHDE: See my Affirmative Comment for Comment 16-34.

Explanation of Abstention:

DORNA: See my Explanation of Abstention for Comment 16-34.

KAHN: See my Explanation of Abstention on Comment 16-34.

16-483 Log #2799 NEC-P16 **Final Action: Reject**
(800.51, 800-53, Figure 800-53 and Table 800-50)

Submitter: Richard P. Owen, City of St. Paul, Minnesota

Comment on Proposal No: 16-114

Recommendation: Continue to accept in principle.

Substantiation: The Panel 3/Panel 16 Task Group, appointed by the NEC TCC, developed this comment.

The task group agrees with Panel 16's action and statement.

The NEC TCC Task Group on Correlation Issues Between Panels 3 and 16 met three times via teleconference calls. The assignment by the TCC Chairman was to attempt to develop a resolution and accompanying comments for the different actions taken on proposals dealing with similar issues by CMP 3 and CMP 16 for their respective Articles in Chapters 7 and 8 of the NEC.

The Task Group studied the issues and determined that there were five major differences in the actions on proposals concerning Articles 725, 760, 770, 800, 820, and 830. The voting on these issues was not unanimous but did pass as at least a simple majority of the Task Group.

One of the major differences involved installing air duct cables in a fabricated air duct without enclosing the cable in a metal raceway.

The Task Group members who attended the teleconference call voted to accept text that permits "air duct cable" to be installed in fabricated ducts without enclosing in an additional metal raceway or metal cable. The text to be accepted by Panel 3 is recommended to be similar to that found in Proposals 3-194 for Article 725 and 3-288 for Article 760. The "air duct cable" will replace the plenum cable that was previously acceptable in fabricated duct without enclosing in a metal raceway or metal cable assembly.

The following members of Panels 3 and 16 participated in this Task Group assignment: From Panel 3, Mr. Sanford E. Egesdal representing the Automatic Fire Alarm Association, Inc., Mr. Ronald E. Maassen representing the National Electrical Contractors Association, and Mr. Mark C. Ode representing Underwriters Laboratories Inc. From Panel 16, Mr. Robert W. Jensen representing the Building Industry Consulting Services International, Mr. Harold C. Ohde representing the International Brotherhood of Electrical Workers, and Mr. Joseph W. Rao representing the Independent Electrical Contractors, Inc. Mr. Richard P. Owen, the Chairman of CMP 3, representing the International Association of Electrical Inspectors, was the chairman of the Task Group.

Panel Meeting Action: Reject

Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:

"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."

This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.

Number Eligible to Vote: 15

Ballot Results: Affirmative: 13 Abstain: 2

Comment on Affirmative:
OHDE: See my Affirmative Comment for Comment 16-34.
Explanation of Abstention:
DORNA: See my Explanation of Abstention for Comment 16-34.
KAHN: See my Explanation of Abstention on Comment 16-34.

16-484 Log #2805 NEC-P16 **Final Action: Reject**
(800.51, 800-53, Figure 800-53 and Table 800-50)

Submitter: Richard P. Owen, City of St. Paul, Minnesota
Comment on Proposal No: 16-113
Recommendation: Continue to accept in principle.
Substantiation: The Panel 3/Panel 16 Task Group, appointed by the NEC TCC, developed this comment.

The task group agrees with Panel 16's action and statement.

The NEC TCC Task Group on Correlation Issues Between Panels 3 and 16 met three times via teleconference calls. The assignment by the TCC Chairman was to attempt to develop a resolution and accompanying comments for the different actions taken on proposals dealing with similar issues by CMP 3 and CMP 16 for their respective Articles in Chapters 7 and 8 of the NEC.

The Task Group studied the issues and determined that there were five major differences in the actions on proposals concerning Articles 725, 760, 770, 800, 820, and 830. The voting on these issues was not unanimous but did pass as at least a simple majority of the Task Group.

One of the major differences involved installing air duct cables in a fabricated air duct without enclosing the cable in a metal raceway.

The Task Group members who attended the teleconference call voted to accept text that permits "air duct cable" to be installed in fabricated ducts without enclosing in an additional metal raceway or metal cable. The text to be accepted by Panel 3 is recommended to be similar to that found in Proposals 3-194 for Article 725 and 3-288 for Article 760. The "air duct cable" will replace the plenum cable that was previously acceptable in fabricated duct without enclosing in a metal raceway or metal cable assembly.

The following members of Panels 3 and 16 participated in this Task Group assignment: From Panel 3, Mr. Sanford E. Egesdal representing the Automatic Fire Alarm Association, Inc., Mr. Ronald E. Maassen representing the National Electrical Contractors Association, and Mr. Mark C. Ode representing Underwriters Laboratories Inc. From Panel 16, Mr. Robert W. Jensen representing the Building Industry Consulting Services International, Mr. Harold C. Ohde representing the International Brotherhood of Electrical Workers, and Mr. Joseph W. Rao representing the Independent Electrical Contractors, Inc. Mr. Richard P. Owen, the Chairman of CMP 3, representing the International Association of Electrical Inspectors, was the chairman of the Task Group.

Panel Meeting Action: Reject
Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:

"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."

This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.
Number Eligible to Vote: 15
Ballot Results: Affirmative: 13 Abstain: 2
Comment on Affirmative:
OHDE: See my Affirmative Comment for Comment 16-34.
Explanation of Abstention:
DORNA: See my Explanation of Abstention for Comment 16-34.
KAHN: See my Explanation of Abstention on Comment 16-34.

16-485 Log #2232 NEC-P16 **Final Action: Accept**
(800.51, 800-53, Figure 800-53, Table 800-50 and Table 800-53)

Note: See the Technical Correlating Committee Note on Comment 16-452.
Submitter: T. David Mills, Bechtel Savannah River, Inc.
Comment on Proposal No: 16-127
Recommendation: Reject proposal in its entirety.
Substantiation:NFPA 90A - 2002 only places a restriction for cables and for testing per NFPA 262 for ceiling cavity plenums (4.3.10.2.6.1) and raised floor plenums (4.3.10.6.5.1). It does not state that these are the only places that this plenum rated cable can be used.
The other sections of NFPA 90A related to all other air spaces including "air ducts" are silent with respect to cable requirements. This indicates plenum rated cables can be placed anywhere in the air conditioning air handling system without any new "Duct" designator. There are not any other requirements in NFPA 90A to indicate anywhere that a "does not correlate" situation exists between NFPA 70 and NFPA 90A.There is no need for any additional environmental air space identifiers or cable type designators.
Panel Meeting Action: Accept
Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:

"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."

This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.
Number Eligible to Vote: 15
Ballot Results: Affirmative: 13 Abstain: 2
Comment on Affirmative:
OHDE: See my Affirmative Comment for Comment 16-34.
Explanation of Abstention:
DORNA: See my Explanation of Abstention for Comment 16-34.
KAHN: See my Explanation of Abstention on Comment 16-34.

16-486 Log #2457 NEC-P16 **Final Action: Accept**
(800.51, 800-53, Figure 800-53, Table 800-50 and Table 800-53)

Note: See the Technical Correlating Committee Note on Comment 16-452.
Submitter: William A. Wolfe, Steel Tube Institute of North America
Comment on Proposal No: 16-116
Recommendation: Reject this proposal.
Substantiation: See our companion proposal on 16-37.
Panel Meeting Action: Accept
Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:

"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."

This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.
Number Eligible to Vote: 15
Ballot Results: Affirmative: 13 Abstain: 2
Comment on Affirmative:
OHDE: See my Affirmative Comment for Comment 16-34.
Explanation of Abstention:
DORNA: See my Explanation of Abstention for Comment 16-34.
KAHN: See my Explanation of Abstention on Comment 16-34.

16-487 Log #2794 NEC-P16 **Final Action: Reject**
(800.51, 800-53, Figure 800-53, Table 800-50 and Table 800-53)

Submitter: Richard P. Owen, City of St. Paul, Minnesota
Comment on Proposal No: 16-116
Recommendation: Continue to accept in principle.
Substantiation: The Panel 3/Panel 16 Task Group, appointed by the NEC TCC, developed this comment.

The task group agrees with Panel 16's action and statement.

The NEC TCC Task Group on Correlation Issues Between Panels 3 and 16 met three times via teleconference calls. The assignment by the TCC Chairman was to attempt to develop a resolution and accompanying comments for the different actions taken on proposals dealing with similar issues by CMP 3 and CMP 16 for their respective Articles in Chapters 7 and 8 of the NEC.

The Task Group studied the issues and determined that there were five major differences in the actions on proposals concerning Articles 725, 760, 770, 800, 820, and 830. The voting on these issues was not unanimous but did pass as at least a simple majority of the Task Group.

One of the major differences involved installing air duct cables in a fabricated air duct without enclosing the cable in a metal raceway.

The Task Group members who attended the teleconference call voted to accept text that permits "air duct cable" to be installed in fabricated ducts without enclosing in an additional metal raceway or metal cable. The text to be accepted by Panel 3 is recommended to be similar to that found in Proposals 3-194 for Article 725 and 3-288 for Article 760. The "air duct cable" will replace the plenum cable that was previously acceptable in fabricated duct without enclosing in a metal raceway or metal cable assembly.

The following members of Panels 3 and 16 participated in this Task Group assignment: From Panel 3, Mr. Sanford E. Egesdal representing the Automatic Fire Alarm Association, Inc., Mr. Ronald E. Maassen representing the National Electrical Contractors Association, and Mr. Mark C. Ode representing Underwriters Laboratories Inc. From Panel 16, Mr. Robert W. Jensen representing the Building Industry Consulting Services International, Mr. Harold C. Ohde representing the International Brotherhood of Electrical Workers, and Mr. Joseph W. Rao representing the Independent Electrical Contractors, Inc. Mr. Richard P. Owen, the Chairman of CMP 3, representing the International Association of Electrical Inspectors, was the chairman of the Task Group.

Panel Meeting Action: Reject

Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:

"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."

This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.

Number Eligible to Vote: 15

Ballot Results: Affirmative: 13 Abstain: 2

Comment on Affirmative:

OHDE: See my Affirmative Comment for Comment 16-34.

Explanation of Abstention:

DORNA: See my Explanation of Abstention for Comment 16-34.

KAHN: See my Explanation of Abstention on Comment 16-34.

16-488 Log #2212 NEC-P16 **Final Action: Accept**

(800.51, 800-53, Figure 800-53, Table 800-53 and Table 800-50)

Note: See the Technical Correlating Committee Note on Comment 16-452.

Submitter: T. David Mills, Bechtel Savannah River, Inc.

Comment on Proposal No: 16-109

Recommendation: Reject proposal in its entirety.

Substantiation:NFPA 90A - 2002 only places a restriction for cables and for testing per NFPA 262 for ceiling cavity plenums (4.3.10.2.6.1) and raised floor plenums (4.3.10.6.5.1). It does not state that these are the only places that this plenum rated cable can be used.

The other sections of NFPA 90A related to all other air spaces including "air ducts" are silent with respect to cable requirements. This indicates plenum rated cables can be placed anywhere in the air conditioning air handling system without any new "Duct" designator. There are not any other requirements in NFPA 90A to indicate anywhere that a "does not correlate" situation exists between NFPA 70 and NFPA 90A.There is no need for any additional environmental air space identifiers or cable type designators.

Panel Meeting Action: Accept

Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:

"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."

This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.

Number Eligible to Vote: 15

Ballot Results: Affirmative: 13 Abstain: 2

Comment on Affirmative:

OHDE: See my Affirmative Comment for Comment 16-34.

Explanation of Abstention:

DORNA: See my Explanation of Abstention for Comment 16-34.

KAHN: See my Explanation of Abstention on Comment 16-34.

16-489 Log #2216 NEC-P16 **Final Action: Accept**

(800.51, 800-53, Figure 800-53, Table 800-53 and Table 800-50)

Note: See the Technical Correlating Committee Note on Comment 16-452.

Submitter: T. David Mills, Bechtel Savannah River, Inc.

Comment on Proposal No: 16-118

Recommendation: Reject proposal in its entirety.

Substantiation:NFPA 90A - 2002 only places a restriction for cables and for testing per NFPA 262 for ceiling cavity plenums (4.3.10.2.6.1) and raised floor plenums (4.3.10.6.5.1). It does not state that these are the only places that this plenum rated cable can be used.

The other sections of NFPA 90A related to all other air spaces including "air ducts" are silent with respect to cable requirements. This indicates plenum rated cables can be placed anywhere in the air conditioning air handling system without any new "Duct" designator. There are not any other requirements in NFPA 90A to indicate anywhere that a "does not correlate" situation exists between NFPA 70 and NFPA 90A.There is no need for any additional environmental air space identifiers or cable type designators.

Panel Meeting Action: Accept

Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:

"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."

This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.

Number Eligible to Vote: 15

Ballot Results: Affirmative: 13 Abstain: 2

Comment on Affirmative:

OHDE: See my Affirmative Comment for Comment 16-34.

Explanation of Abstention:

DORNA: See my Explanation of Abstention for Comment 16-34.

KAHN: See my Explanation of Abstention on Comment 16-34.

16-490 Log #2219 NEC-P16 **Final Action: Accept**

(800.51, 800-53, Figure 800-53, Table 800-53 and Table 800-50)

Note: See the Technical Correlating Committee Note on Comment 16-452.

Submitter: T. David Mills, Bechtel Savannah River, Inc.

Comment on Proposal No: 16-124

Recommendation: Reject proposal in its entirety.

Substantiation:NFPA 90A - 2002 only places a restriction for cables and for testing per NFPA 262 for ceiling cavity plenums (4.3.10.2.6.1) and raised floor plenums (4.3.10.6.5.1). It does not state that these are the only places that this plenum rated cable can be used.

The other sections of NFPA 90A related to all other air spaces including "air ducts" are silent with respect to cable requirements. This indicates plenum rated cables can be placed anywhere in the air conditioning air handling system without any new "Duct" designator. There are not any other requirements in NFPA 90A to indicate anywhere that a "does not correlate" situation exists between NFPA 70 and NFPA 90A.There is no need for any additional environmental air space identifiers or cable type designators.

Panel Meeting Action: Accept

Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:

"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."

This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.

Number Eligible to Vote: 15

Ballot Results: Affirmative: 13 Abstain: 2

Comment on Affirmative:

OHDE: See my Affirmative Comment for Comment 16-34.

Explanation of Abstention:

DORNA: See my Explanation of Abstention for Comment 16-34.

KAHN: See my Explanation of Abstention on Comment 16-34.

16-491 Log #2225 NEC-P16 **Final Action: Accept**
(800.51, 800-53, Figure 800-53, Table 800-53 and Table 800-50)

Note: See the Technical Correlating Committee Note on Comment 16-452.
Submitter: T. David Mills, Bechtel Savannah River, Inc.
Comment on Proposal No: 16-114
Recommendation: Reject proposal in its entirety.
Substantiation:NFPA 90A - 2002 only places a restriction for cables and for testing per NFPA 262 for ceiling cavity plenums (4.3.10.2.6.1) and raised floor plenums (4.3.10.6.5.1). It does not state that these are the only places that this plenum rated cable can be used.
The other sections of NFPA 90A related to all other air spaces including "air ducts" are silent with respect to cable requirements. This indicates plenum rated cables can be placed anywhere in the air conditioning air handling system without any new "Duct" designator. There are not any other requirements in NFPA 90A to indicate anywhere that a "does not correlate" situation exists between NFPA 70 and NFPA 90A.There is no need for any additional environmental air space identifiers or cable type designators.
Panel Meeting Action: Accept
Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:
"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."
This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.
Number Eligible to Vote: 15
Ballot Results: Affirmative: 13 Abstain: 2
Comment on Affirmative:
OHDE: See my Affirmative Comment for Comment 16-34.
Explanation of Abstention:
DORNA: See my Explanation of Abstention for Comment 16-34.
KAHN: See my Explanation of Abstention on Comment 16-34.

16-492 Log #2227 NEC-P16 **Final Action: Accept**
(800.51, 800-53, Figure 800-53, Table 800-53 and Table 800-50)

Note: See the Technical Correlating Committee Note on Comment 16-452.
Submitter: T. David Mills, Bechtel Savannah River, Inc.
Comment on Proposal No: 16-119
Recommendation: Reject the proposal in its entirety.
Substantiation:NFPA 90A - 2002 only places a restriction for cables and for testing per NFPA 262 for ceiling cavity plenums (4.3.10.2.6.1) and raised floor plenums (4.3.10.6.5.1). It does not state that these are the only places that this plenum rated cable can be used.
The other sections of NFPA 90A related to all other air spaces including "air ducts" are silent with respect to cable requirements. This indicates plenum rated cables can be placed anywhere in the air conditioning air handling system without any new "Duct" designator. There are not any other requirements in NFPA 90A to indicate anywhere that a "does not correlate" situation exists between NFPA 70 and NFPA 90A.There is no need for any additional environmental air space identifiers or cable type designators.
Panel Meeting Action: Accept
Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:
"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."
This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.
Number Eligible to Vote: 15
Ballot Results: Affirmative: 13 Abstain: 2
Comment on Affirmative:
OHDE: See my Affirmative Comment for Comment 16-34.
Explanation of Abstention:
DORNA: See my Explanation of Abstention for Comment 16-34.
KAHN: See my Explanation of Abstention on Comment 16-34.

16-493 Log #2230 NEC-P16 **Final Action: Accept**
(800.51, 800-53, Figure 800-53, Table 800-53 and Table 800-50)

Note: See the Technical Correlating Committee Note on Comment 16-452.
Submitter: T. David Mills, Bechtel Savannah River, Inc.
Comment on Proposal No: 16-113
Recommendation: Reject the proposal in its entirety.
Substantiation:NFPA 90A - 2002 only places a restriction for cables and for testing per NFPA 262 for ceiling cavity plenums (4.3.10.2.6.1) and raised floor plenums (4.3.10.6.5.1). It does not state that these are the only places that this plenum rated cable can be used.
The other sections of NFPA 90A related to all other air spaces including "air ducts" are silent with respect to cable requirements. This indicates plenum rated cables can be placed anywhere in the air conditioning air handling system without any new "Duct" designator. There are not any other requirements in NFPA 90A to indicate anywhere that a "does not correlate" situation exists between NFPA 70 and NFPA 90A.There is no need for any additional environmental air space identifiers or cable type designators.
Panel Meeting Action: Accept
Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:
"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."
This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.
Number Eligible to Vote: 15
Ballot Results: Affirmative: 13 Abstain: 2
Comment on Affirmative:
OHDE: See my Affirmative Comment for Comment 16-34.
Explanation of Abstention:
DORNA: See my Explanation of Abstention for Comment 16-34.
KAHN: See my Explanation of Abstention on Comment 16-34.

16-494 Log #2231 NEC-P16 **Final Action: Accept**
(800.51, 800-53, Figure 800-53, Table 800-53 and Table 800-50)

Note: See the Technical Correlating Committee Note on Comment 16-452.
Submitter: T. David Mills, Bechtel Savannah River, Inc.
Comment on Proposal No: 16-122
Recommendation: Reject proposal in its entirety.
Substantiation:NFPA 90A - 2002 only places a restriction for cables and for testing per NFPA 262 for ceiling cavity plenums (4.3.10.2.6.1) and raised floor plenums (4.3.10.6.5.1). It does not state that these are the only places that this plenum rated cable can be used.
The other sections of NFPA 90A related to all other air spaces including "air ducts" are silent with respect to cable requirements. This indicates plenum rated cables can be placed anywhere in the air conditioning air handling system without any new "Duct" designator. There are not any other requirements in NFPA 90A to indicate anywhere that a "does not correlate" situation exists between NFPA 70 and NFPA 90A.There is no need for any additional environmental air space identifiers or cable type designators.
Panel Meeting Action: Accept
Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:
"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."
This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.
Number Eligible to Vote: 15
Ballot Results: Affirmative: 13 Abstain: 2
Comment on Affirmative:
OHDE: See my Affirmative Comment for Comment 16-34.
Explanation of Abstention:
DORNA: See my Explanation of Abstention for Comment 16-34.
KAHN: See my Explanation of Abstention on Comment 16-34.

16-495 Log #2236 NEC-P16 **Final Action: Accept**
(800.51, 800-53, Figure 800-53, Table 800-53 and Table 800-50)

Note: See the Technical Correlating Committee Note on Comment 16-452.
Submitter: T. David Mills, Bechtel Savannah River, Inc.
Comment on Proposal No: 16-116
Recommendation: Reject proposal in its entirety.
Substantiation:NFPA 90A - 2002 only places a restriction for cables and for testing per NFPA 262 for ceiling cavity plenums (4.3.10.2.6.1) and raised floor plenums (4.3.10.6.5.1). It does not state that these are the only places that this plenum rated cable can be used.
The other sections of NFPA 90A related to all other air spaces including "air ducts" are silent with respect to cable requirements. This indicates plenum rated cables can be placed anywhere in the air conditioning air handling system without any new "Duct" designator. There are not any other requirements in NFPA 90A to indicate anywhere that a "does not correlate" situation exists between NFPA 70 and NFPA 90A.There is no need for any additional environmental air space identifiers or cable type designators.
Panel Meeting Action: Accept
Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:
"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."
This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.
Number Eligible to Vote: 15
Ballot Results: Affirmative: 13 Abstain: 2
Comment on Affirmative:
OHDE: See my Affirmative Comment for Comment 16-34.
Explanation of Abstention:
DORNA: See my Explanation of Abstention for Comment 16-34.
KAHN: See my Explanation of Abstention on Comment 16-34.

16-496 Log #2238 NEC-P16 **Final Action: Accept**
(800.51, 800-53, Figure 800-53, Table 800-53 and Table 800-50)

Note: See the Technical Correlating Committee Note on Comment 16-452.
Submitter: T. David Mills, Bechtel Savannah River, Inc.
Comment on Proposal No: 16-123
Recommendation: Reject proposal in its entirety.
Substantiation:NFPA 90A - 2002 only places a restriction for cables and for testing per NFPA 262 for ceiling cavity plenums (4.3.10.2.6.1) and raised floor plenums (4.3.10.6.5.1). It does not state that these are the only places that this plenum rated cable can be used.
The other sections of NFPA 90A related to all other air spaces including "air ducts" are silent with respect to cable requirements. This indicates plenum rated cables can be placed anywhere in the air conditioning air handling system without any new "Duct" designator. There are not any other requirements in NFPA 90A to indicate anywhere that a "does not correlate" situation exists between NFPA 70 and NFPA 90A.There is no need for any additional environmental air space identifiers or cable type designators.
Panel Meeting Action: Accept
Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:
"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."
This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.
Number Eligible to Vote: 15
Ballot Results: Affirmative: 13 Abstain: 2
Comment on Affirmative:
OHDE: See my Affirmative Comment for Comment 16-34.
Explanation of Abstention:
DORNA: See my Explanation of Abstention for Comment 16-34.
KAHN: See my Explanation of Abstention on Comment 16-34.

16-497 Log #2459 NEC-P16 **Final Action: Accept**
(800.51, 800-53, Table 800-50 and Table 800-53)

Note: See the Technical Correlating Committee Note on Comment 16-452.
Submitter: William A. Wolfe, Steel Tube Institute of North America
Comment on Proposal No: 16-117
Recommendation: Reject this proposal.
Substantiation: See our companion proposal on 16-37.
Panel Meeting Action: Accept
Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:
"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."
This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.
Number Eligible to Vote: 15
Ballot Results: Affirmative: 13 Abstain: 2
Comment on Affirmative:
OHDE: See my Affirmative Comment for Comment 16-34.
Explanation of Abstention:
DORNA: See my Explanation of Abstention for Comment 16-34.
KAHN: See my Explanation of Abstention on Comment 16-34.

16-498 Log #2468 NEC-P16 **Final Action: Accept**
(800.51, 800-53, Table 800-50 and Table 800-53)

Note: See the Technical Correlating Committee Note on Comment 16-452.
Submitter: William A. Wolfe, Steel Tube Institute of North America
Comment on Proposal No: 16-120
Recommendation: Reject this proposal.
Substantiation: See our companion proposal on 16-37.
Panel Meeting Action: Accept
Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:
"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."
This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.
Number Eligible to Vote: 15
Ballot Results: Affirmative: 13 Abstain: 2
Comment on Affirmative:
OHDE: See my Affirmative Comment for Comment 16-34.
Explanation of Abstention:
DORNA: See my Explanation of Abstention for Comment 16-34.
KAHN: See my Explanation of Abstention on Comment 16-34.

16-499 Log #2795 NEC-P16 **Final Action: Reject**
(800.51, 800-53, Table 800-50 and Table 800-53)

Submitter: Richard P. Owen, City of St. Paul, Minnesota
Comment on Proposal No: 16-117
Recommendation: Continue to accept in principle.
Substantiation: The Panel 3/Panel 16 Task Group, appointed by the NEC TCC, developed this comment.
The task group agrees with Panel 16's action and statement.
The NEC TCC Task Group on Correlation Issues Between Panels 3 and 16 met three times via teleconference calls. The assignment by the TCC Chairman was to attempt to develop a resolution and accompanying comments for the different actions taken on proposals dealing with similar issues by CMP 3 and CMP 16 for their respective Articles in Chapters 7 and 8 of the NEC.
The Task Group studied the issues and determined that there were five major differences in the actions on proposals concerning Articles 725, 760, 770, 800, 820, and 830. The voting on these issues was not unanimous but did pass as at

least a simple majority of the Task Group.

One of the major differences involved installing air duct cables in a fabricated air duct without enclosing the cable in a metal raceway.

The Task Group members who attended the teleconference call voted to accept text that permits "air duct cable" to be installed in fabricated ducts without enclosing in an additional metal raceway or metal cable. The text to be accepted by Panel 3 is recommended to be similar to that found in Proposals 3-194 for Article 725 and 3-288 for Article 760. The "air duct cable" will replace the plenum cable that was previously acceptable in fabricated duct without enclosing in a metal raceway or metal cable assembly.

The following members of Panels 3 and 16 participated in this Task Group assignment: From Panel 3, Mr. Sanford E. Egesdal representing the Automatic Fire Alarm Association, Inc., Mr. Ronald E. Maassen representing the National Electrical Contractors Association, and Mr. Mark C. Ode representing Underwriters Laboratories Inc. From Panel 16, Mr. Robert W. Jensen representing the Building Industry Consulting Services International, Mr. Harold C. Ohde representing the International Brotherhood of Electrical Workers, and Mr. Joseph W. Rao representing the Independent Electrical Contractors, Inc. Mr. Richard P. Owen, the Chairman of CMP 3, representing the International Association of Electrical Inspectors, was the chairman of the Task Group.

Panel Meeting Action: Reject

Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:

"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."

This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.

Number Eligible to Vote: 15

Ballot Results: Affirmative: 13 Abstain: 2

Comment on Affirmative:

OHDE: See my Affirmative Comment for Comment 16-34.

Explanation of Abstention:

DORNA: See my Explanation of Abstention for Comment 16-34.

KAHN: See my Explanation of Abstention on Comment 16-34.

16-500 Log #2798 NEC-P16 **Final Action: Reject**
(800.51, 800-53, Table 800-50 and Table 800-53)

Submitter: Richard P. Owen, City of St. Paul, Minnesota

Comment on Proposal No: 16-120

Recommendation: Continue to accept in principle.

Substantiation: The Panel 3/Panel 16 Task Group, appointed by the NEC TCC, developed this comment.

The task group agrees with Panel 16's action and statement.

The NEC TCC Task Group on Correlation Issues Between Panels 3 and 16 met three times via teleconference calls. The assignment by the TCC Chairman was to attempt to develop a resolution and accompanying comments for the different actions taken on proposals dealing with similar issues by CMP 3 and CMP 16 for their respective Articles in Chapters 7 and 8 of the NEC.

The Task Group studied the issues and determined that there were five major differences in the actions on proposals concerning Articles 725, 760, 770, 800, 820, and 830. The voting on these issues was not unanimous but did pass as at least a simple majority of the Task Group.

One of the major differences involved installing air duct cables in a fabricated air duct without enclosing the cable in a metal raceway.

The Task Group members who attended the teleconference call voted to accept text that permits "air duct cable" to be installed in fabricated ducts without enclosing in an additional metal raceway or metal cable. The text to be accepted by Panel 3 is recommended to be similar to that found in Proposals 3-194 for Article 725 and 3-288 for Article 760. The "air duct cable" will replace the plenum cable that was previously acceptable in fabricated duct without enclosing in a metal raceway or metal cable assembly.

The following members of Panels 3 and 16 participated in this Task Group assignment: From Panel 3, Mr. Sanford E. Egesdal representing the Automatic Fire Alarm Association, Inc., Mr. Ronald E. Maassen representing the National Electrical Contractors Association, and Mr. Mark C. Ode representing Underwriters Laboratories Inc. From Panel 16, Mr. Robert W. Jensen representing the Building Industry Consulting Services International, Mr. Harold C. Ohde representing the International Brotherhood of Electrical Workers, and Mr. Joseph W. Rao representing the Independent Electrical Contractors, Inc. Mr. Richard P. Owen, the Chairman of CMP 3, representing the International Association of Electrical Inspectors, was the chairman of the Task Group.

Panel Meeting Action: Reject

Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:

"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."

This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.

Number Eligible to Vote: 15

Ballot Results: Affirmative: 13 Abstain: 2

Comment on Affirmative:

OHDE: See my Affirmative Comment for Comment 16-34.

Explanation of Abstention:

DORNA: See my Explanation of Abstention for Comment 16-34.

KAHN: See my Explanation of Abstention on Comment 16-34.

16-501 Log #2462 NEC-P16 **Final Action: Accept**
(800.51, 800-53, Table 800-50, Table 800-53 and Figure 800-53)

Note: See the Technical Correlating Committee Note on Comment 16-452.

Submitter: William A. Wolfe, Steel Tube Institute of North America

Comment on Proposal No: 16-118

Recommendation: Reject this proposal.

Substantiation: See our companion proposal on 16-37.

Panel Meeting Action: Accept

Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:

"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."

This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.

Number Eligible to Vote: 15

Ballot Results: Affirmative: 13 Abstain: 2

Comment on Affirmative:

OHDE: See my Affirmative Comment for Comment 16-34.

Explanation of Abstention:

DORNA: See my Explanation of Abstention for Comment 16-34.

KAHN: See my Explanation of Abstention on Comment 16-34.

16-502 Log #2466 NEC-P16 **Final Action: Accept**
(800.51, 800-53, Table 800-50, Table 800-53 and Figure 800-53)

Note: See the Technical Correlating Committee Note on Comment 16-452.

Submitter: William A. Wolfe, Steel Tube Institute of North America

Comment on Proposal No: 16-119

Recommendation: Reject this proposal.

Substantiation: See our companion proposal on 16-37.

Panel Meeting Action: Accept

Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:

"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."

This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.

Number Eligible to Vote: 15

Ballot Results: Affirmative: 13 Abstain: 2

Comment on Affirmative:

OHDE: See my Affirmative Comment for Comment 16-34.

Explanation of Abstention:

DORNA: See my Explanation of Abstention for Comment 16-34.

KAHN: See my Explanation of Abstention on Comment 16-34.

16-503 Log #2479 NEC-P16 **Final Action: Accept**
(800.51, 800-53 ,Table 800-50, Table 800-53 and Figure 800-53)

Note: See the Technical Correlating Committee Note on Comment 16-452.
Submitter: William A. Wolfe, Steel Tube Institute of North America
Comment on Proposal No: 16-123
Recommendation: Reject this proposal.
Substantiation: See our companion proposal on 16-37.
Panel Meeting Action: Accept
Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:
"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."
This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.
Number Eligible to Vote: 15
Ballot Results: Affirmative: 13 Abstain: 2
Comment on Affirmative:
OHDE: See my Affirmative Comment for Comment 16-34.
Explanation of Abstention:
DORNA: See my Explanation of Abstention for Comment 16-34.
KAHN: See my Explanation of Abstention on Comment 16-34.

16-504 Log #2483 NEC-P16 **Final Action: Accept**
(800.51, 800-53 ,Table 800-50, Table 800-53 and Figure 800-53)

Note: See the Technical Correlating Committee Note on Comment 16-452.
Submitter: William A. Wolfe, Steel Tube Institute of North America
Comment on Proposal No: 16-124
Recommendation: Reject this proposal.
Substantiation: See our companion proposal on 16-37.
Panel Meeting Action: Accept
Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:
"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."
This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.
Number Eligible to Vote: 15
Ballot Results: Affirmative: 13 Abstain: 2
Comment on Affirmative:
OHDE: See my Affirmative Comment for Comment 16-34.
Explanation of Abstention:
DORNA: See my Explanation of Abstention for Comment 16-34.
KAHN: See my Explanation of Abstention on Comment 16-34.

16-505 Log #2507 NEC-P16 **Final Action: Accept**
(800.51, 800-53, Table 800-50, Table 800-53 and Figure 800-53)

Note: See the Technical Correlating Committee Note on Comment 16-452.
Submitter: William A. Wolfe, Steel Tube Institute of North America
Comment on Proposal No: 16-122
Recommendation: Reject this propoal.
Substantiation: See our companion proposal on 16-37.
Panel Meeting Action: Accept
Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:
"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."
This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.
Number Eligible to Vote: 15
Ballot Results: Affirmative: 13 Abstain: 2
Comment on Affirmative:
OHDE: See my Affirmative Comment for Comment 16-34.
Explanation of Abstention:
DORNA: See my Explanation of Abstention for Comment 16-34.
KAHN: See my Explanation of Abstention on Comment 16-34.

16-506 Log #2796 NEC-P16 **Final Action: Reject**
(800.51, 800-53, Table 800-50, Table 800-53 and Figure 800-53)

Submitter: Richard P. Owen, City of St. Paul, Minnesota
Comment on Proposal No: 16-118
Recommendation: Continue to accept in principle.
Substantiation: The Panel 3/Panel 16 Task Group, appointed by the NEC TCC, developed this comment.
The task group agrees with Panel 16's action and statement.
The NEC TCC Task Group on Correlation Issues Between Panels 3 and 16 met three times via teleconference calls. The assignment by the TCC Chairman was to attempt to develop a resolution and accompanying comments for the different actions taken on proposals dealing with similar issues by CMP 3 and CMP 16 for their respective Articles in Chapters 7 and 8 of the NEC.
The Task Group studied the issues and determined that there were five major differences in the actions on proposals concerning Articles 725, 760, 770, 800, 820, and 830. The voting on these issues was not unanimous but did pass as at least a simple majority of the Task Group.
One of the major differences involved installing air duct cables in a fabricated air duct without enclosing the cable in a metal raceway.
The Task Group members who attended the teleconference call voted to accept text that permits "air duct cable" to be installed in fabricated ducts without enclosing in an additional metal raceway or metal cable. The text to be accepted by Panel 3 is recommended to be similar to that found in Proposals 3-194 for Article 725 and 3-288 for Article 760. The "air duct cable" will replace the plenum cable that was previously acceptable in fabricated duct without enclosing in a metal raceway or metal cable assembly.
The following members of Panels 3 and 16 participated in this Task Group assignment: From Panel 3, Mr. Sanford E. Egesdal representing the Automatic Fire Alarm Association, Inc., Mr. Ronald E. Maassen representing the National Electrical Contractors Association, and Mr. Mark C. Ode representing Underwriters Laboratories Inc. From Panel 16, Mr. Robert W. Jensen representing the Building Industry Consulting Services International, Mr. Harold C. Ohde representing the International Brotherhood of Electrical Workers, and Mr. Joseph W. Rao representing the Independent Electrical Contractors, Inc. Mr. Richard P. Owen, the Chairman of CMP 3, representing the International Association of Electrical Inspectors, was the chairman of the Task Group.
Panel Meeting Action: Reject
Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:
"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."
This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.
Number Eligible to Vote: 15
Ballot Results: Affirmative: 13 Abstain: 2
Comment on Affirmative:
OHDE: See my Affirmative Comment for Comment 16-34.
Explanation of Abstention:
DORNA: See my Explanation of Abstention for Comment 16-34.
KAHN: See my Explanation of Abstention on Comment 16-34.

16-507 Log #2797 NEC-P16 **Final Action: Reject**
(800.51, 800-53, Table 800-50, Table 800-53 and Figure 800-53)

Submitter: Richard P. Owen, City of St. Paul, Minnesota
Comment on Proposal No: 16-119
Recommendation: Continue to accept in principle.
Substantiation: The Panel 3/Panel 16 Task Group, appointed by the NEC TCC, developed this comment.
The task group agrees with Panel 16's action and statement.

The NEC TCC Task Group on Correlation Issues Between Panels 3 and 16 met three times via teleconference calls. The assignment by the TCC Chairman was to attempt to develop a resolution and accompanying comments for the different actions taken on proposals dealing with similar issues by CMP 3 and CMP 16 for their respective Articles in Chapters 7 and 8 of the NEC.

The Task Group studied the issues and determined that there were five major differences in the actions on proposals concerning Articles 725, 760, 770, 800, 820, and 830. The voting on these issues was not unanimous but did pass as at least a simple majority of the Task Group.

One of the major differences involved installing air duct cables in a fabricated air duct without enclosing the cable in a metal raceway.

The Task Group members who attended the teleconference call voted to accept text that permits "air duct cable" to be installed in fabricated ducts without enclosing in an additional metal raceway or metal cable. The text to be accepted by Panel 3 is recommended to be similar to that found in Proposals 3-194 for Article 725 and 3-288 for Article 760. The "air duct cable" will replace the plenum cable that was previously acceptable in fabricated duct without enclosing in a metal raceway or metal cable assembly.

The following members of Panels 3 and 16 participated in this Task Group assignment: From Panel 3, Mr. Sanford E. Egesdal representing the Automatic Fire Alarm Association, Inc., Mr. Ronald E. Maassen representing the National Electrical Contractors Association, and Mr. Mark C. Ode representing Underwriters Laboratories Inc. From Panel 16, Mr. Robert W. Jensen representing the Building Industry Consulting Services International, Mr. Harold C. Ohde representing the International Brotherhood of Electrical Workers, and Mr. Joseph W. Rao representing the Independent Electrical Contractors, Inc. Mr. Richard P. Owen, the Chairman of CMP 3, representing the International Association of Electrical Inspectors, was the chairman of the Task Group.

Panel Meeting Action: Reject

Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:

"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."

This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.

Number Eligible to Vote: 15

Ballot Results: Affirmative: 13 Abstain: 2

Comment on Affirmative:

OHDE: See my Affirmative Comment for Comment 16-34.

Explanation of Abstention:

DORNA: See my Explanation of Abstention for Comment 16-34.

KAHN: See my Explanation of Abstention on Comment 16-34.

16-508 Log #2824 NEC-P16 **Final Action: Reject**

(800.51, 800-53, Table 800-50, Table 800-53 and Figure 800-53)

Submitter: Richard P. Owen, City of St. Paul, Minnesota

Comment on Proposal No: 16-123

Recommendation: Continue to accept in principle.

Substantiation: The Panel 3/Panel 16 Task Group, appointed by the NEC TCC, developed this comment.

The task group agrees with Panel 16's action and statement.

The NEC TCC Task Group on Correlation Issues Between Panels 3 and 16 met three times via teleconference calls. The assignment by the TCC Chairman was to attempt to develop a resolution and accompanying comments for the different actions taken on proposals dealing with similar issues by CMP 3 and CMP 16 for their respective Articles in Chapters 7 and 8 of the NEC.

The Task Group studied the issues and determined that there were five major differences in the actions on proposals concerning Articles 725, 760, 770, 800, 820, and 830. The voting on these issues was not unanimous but did pass as at least a simple majority of the Task Group.

One of the major differences involved installing air duct cables in a fabricated air duct without enclosing the cable in a metal raceway.

The Task Group members who attended the teleconference call voted to accept text that permits "air duct cable" to be installed in fabricated ducts without enclosing in an additional metal raceway or metal cable. The text to be accepted by Panel 3 is recommended to be similar to that found in Proposals 3-194 for Article 725 and 3-288 for Article 760. The "air duct cable" will replace the plenum cable that was previously acceptable in fabricated duct without enclosing in a metal raceway or metal cable assembly.

The following members of Panels 3 and 16 participated in this Task Group assignment: From Panel 3, Mr. Sanford E. Egesdal representing the Automatic Fire Alarm Association, Inc., Mr. Ronald E. Maassen representing the National Electrical Contractors Association, and Mr. Mark C. Ode representing Underwriters Laboratories Inc. From Panel 16, Mr. Robert W. Jensen representing the Building Industry Consulting Services International, Mr. Harold C. Ohde representing the International Brotherhood of Electrical Workers, and Mr. Joseph W. Rao representing the Independent Electrical Contractors, Inc. Mr. Richard P. Owen, the Chairman of CMP 3, representing the International Association of Electrical Inspectors, was the chairman of the Task Group.

Panel Meeting Action: Reject

Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:

"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."

This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.

Number Eligible to Vote: 15

Ballot Results: Affirmative: 13 Abstain: 2

Comment on Affirmative:

OHDE: See my Affirmative Comment for Comment 16-34.

Explanation of Abstention:

DORNA: See my Explanation of Abstention for Comment 16-34.

KAHN: See my Explanation of Abstention on Comment 16-34.

16-509 Log #2825 NEC-P16 **Final Action: Reject**

(800.51, 800-53, Table 800-50, Table 800-53 and Figure 800-53)

Submitter: Richard P. Owen, City of St. Paul, Minnesota

Comment on Proposal No: 16-124

Recommendation: Continue to accept in principle.

Substantiation: The Panel 3/Panel 16 Task Group, appointed by the NEC TCC, developed this comment.

The task group agrees with Panel 16's action and statement.

The NEC TCC Task Group on Correlation Issues Between Panels 3 and 16 met three times via teleconference calls. The assignment by the TCC Chairman was to attempt to develop a resolution and accompanying comments for the different actions taken on proposals dealing with similar issues by CMP 3 and CMP 16 for their respective Articles in Chapters 7 and 8 of the NEC.

The Task Group studied the issues and determined that there were five major differences in the actions on proposals concerning Articles 725, 760, 770, 800, 820, and 830. The voting on these issues was not unanimous but did pass as at least a simple majority of the Task Group.

One of the major differences involved installing air duct cables in a fabricated air duct without enclosing the cable in a metal raceway.

The Task Group members who attended the teleconference call voted to accept text that permits "air duct cable" to be installed in fabricated ducts without enclosing in an additional metal raceway or metal cable. The text to be accepted by Panel 3 is recommended to be similar to that found in Proposals 3-194 for Article 725 and 3-288 for Article 760. The "air duct cable" will replace the plenum cable that was previously acceptable in fabricated duct without enclosing in a metal raceway or metal cable assembly.

The following members of Panels 3 and 16 participated in this Task Group assignment: From Panel 3, Mr. Sanford E. Egesdal representing the Automatic Fire Alarm Association, Inc., Mr. Ronald E. Maassen representing the National Electrical Contractors Association, and Mr. Mark C. Ode representing Underwriters Laboratories Inc. From Panel 16, Mr. Robert W. Jensen representing the Building Industry Consulting Services International, Mr. Harold C. Ohde representing the International Brotherhood of Electrical Workers, and Mr. Joseph W. Rao representing the Independent Electrical Contractors, Inc. Mr. Richard P. Owen, the Chairman of CMP 3, representing the International Association of Electrical Inspectors, was the chairman of the Task Group.

Panel Meeting Action: Reject

Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:

"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."

This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.
Number Eligible to Vote: 15
Ballot Results: Affirmative: 13 Abstain: 2
Comment on Affirmative:
OHDE: See my Affirmative Comment for Comment 16-34.
Explanation of Abstention:
DORNA: See my Explanation of Abstention for Comment 16-34.
KAHN: See my Explanation of Abstention on Comment 16-34.

16-510 Log #2828 NEC-P16 **Final Action: Reject**
(800.51, 800-53, Table 800-50, Table 800-53 and Figure 800-53)

Submitter: Richard P. Owen, City of St. Paul, Minnesota
Comment on Proposal No: 16-127
Recommendation: Continue to accept in principle.
Substantiation: The Panel 3/Panel 16 Task Group, appointed by the NEC TCC, developed this comment.
The task group agrees with Panel 16's action and statement.
The NEC TCC Task Group on Correlation Issues Between Panels 3 and 16 met three times via teleconference calls. The assignment by the TCC Chairman was to attempt to develop a resolution and accompanying comments for the different actions taken on proposals dealing with similar issues by CMP 3 and CMP 16 for their respective Articles in Chapters 7 and 8 of the NEC.
The Task Group studied the issues and determined that there were five major differences in the actions on proposals concerning Articles 725, 760, 770, 800, 820, and 830. The voting on these issues was not unanimous but did pass as at least a simple majority of the Task Group.
One of the major differences involved installing air duct cables in a fabricated air duct without enclosing the cable in a metal raceway.
The Task Group members who attended the teleconference call voted to accept text that permits "air duct cable" to be installed in fabricated ducts without enclosing in an additional metal raceway or metal cable. The text to be accepted by Panel 3 is recommended to be similar to that found in Proposals 3-194 for Article 725 and 3-288 for Article 760. The "air duct cable" will replace the plenum cable that was previously acceptable in fabricated duct without enclosing in a metal raceway or metal cable assembly.
The following members of Panels 3 and 16 participated in this Task Group assignment: From Panel 3, Mr. Sanford E. Egesdal representing the Automatic Fire Alarm Association, Inc., Mr. Ronald E. Maassen representing the National Electrical Contractors Association, and Mr. Mark C. Ode representing Underwriters Laboratories Inc. From Panel 16, Mr. Robert W. Jensen representing the Building Industry Consulting Services International, Mr. Harold C. Ohde representing the International Brotherhood of Electrical Workers, and Mr. Joseph W. Rao representing the Independent Electrical Contractors, Inc. Mr. Richard P. Owen, the Chairman of CMP 3, representing the International Association of Electrical Inspectors, was the chairman of the Task Group.
Panel Meeting Action: Reject
Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:
"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."
This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.
Number Eligible to Vote: 15
Ballot Results: Affirmative: 13 Abstain: 2
Comment on Affirmative:
OHDE: See my Affirmative Comment for Comment 16-34.
Explanation of Abstention:
DORNA: See my Explanation of Abstention for Comment 16-34.
KAHN: See my Explanation of Abstention on Comment 16-34.

16-511 Log #2829 NEC-P16 **Final Action: Reject**
(800.51, 800-53, Table 800-50, Table 800-53 and Figure 800-53)

Submitter: Richard P. Owen, City of St. Paul, Minnesota
Comment on Proposal No: 16-122
Recommendation: Continue to accept in principle.
Substantiation: The Panel 3/Panel 16 Task Group, appointed by the NEC TCC, developed this comment.
The task group agrees with Panel 16's action and statement.
The NEC TCC Task Group on Correlation Issues Between Panels 3 and 16 met three times via teleconference calls. The assignment by the TCC Chairman was to attempt to develop a resolution and accompanying comments for the different actions taken on proposals dealing with similar issues by CMP 3 and CMP 16 for their respective Articles in Chapters 7 and 8 of the NEC.
The Task Group studied the issues and determined that there were five major differences in the actions on proposals concerning Articles 725, 760, 770, 800, 820, and 830. The voting on these issues was not unanimous but did pass as at least a simple majority of the Task Group.
One of the major differences involved installing air duct cables in a fabricated air duct without enclosing the cable in a metal raceway.
The Task Group members who attended the teleconference call voted to accept text that permits "air duct cable" to be installed in fabricated ducts without enclosing in an additional metal raceway or metal cable. The text to be accepted by Panel 3 is recommended to be similar to that found in Proposals 3-194 for Article 725 and 3-288 for Article 760. The "air duct cable" will replace the plenum cable that was previously acceptable in fabricated duct without enclosing in a metal raceway or metal cable assembly.
The following members of Panels 3 and 16 participated in this Task Group assignment: From Panel 3, Mr. Sanford E. Egesdal representing the Automatic Fire Alarm Association, Inc., Mr. Ronald E. Maassen representing the National Electrical Contractors Association, and Mr. Mark C. Ode representing Underwriters Laboratories Inc. From Panel 16, Mr. Robert W. Jensen representing the Building Industry Consulting Services International, Mr. Harold C. Ohde representing the International Brotherhood of Electrical Workers, and Mr. Joseph W. Rao representing the Independent Electrical Contractors, Inc. Mr. Richard P. Owen, the Chairman of CMP 3, representing the International Association of Electrical Inspectors, was the chairman of the Task Group.
Panel Meeting Action: Reject
Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:
"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."
This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.
Number Eligible to Vote: 15
Ballot Results: Affirmative: 13 Abstain: 2
Comment on Affirmative:
OHDE: See my Affirmative Comment for Comment 16-34.
Explanation of Abstention:
DORNA: See my Explanation of Abstention for Comment 16-34.
KAHN: See my Explanation of Abstention on Comment 16-34.

16-512 Log #3788 NEC-P16 **Final Action: Accept**
(800.51, 800.53)

Note: See the Technical Correlating Committee Note on Comment 16-452.
Submitter: Marcelo M. Hirschler, GBH International / Rep. Fire Retardant Chemicals Association
Comment on Proposal No: 16-108
Recommendation: Reject this proposal - Also reject the references to NFPA 90A in fine print notes and the creation of the new category of air duct cables and the subdivision of plenums. Revise the FPN to 800.51 as follows, and make no other changes.
~~FPN: One method of defining low smoke-producing cables is by establishing an acceptable value of the smoke produced when tested in accordance with NFPA 262-1999, Standard Method of Test for Flame Travel and Smoke of Wires and Cables for Use in Air-Handling Spaces, to a maximum peak optical density of 0.5 and a maximum average optical density of 0.15. Similarly, one method of defining fire-resistant cables is by defining maximum allowable flame travel distance of 1.52 m (5 ft) when tested in accordance with the same test.~~
FPN: One method of defining a cable that is low smoke-producing cable and fire-resistant cable is that the cable exhibits a maximum peak optical density of 0.5 or less, an average optical density of 0.15 or less, and a maximum flame spread distance of 1.52 m (5 ft) or less when tested in accordance with NFPA 262, Standard Method of Test for Flame Travel and Smoke of Wires and Cables for Use in Air-Handling Spaces.
Substantiation: There is no need for a new category of CMD cables. There is also no justification for limiting the use of traditional plenum cables. It has become clear now that the expertise needed for choosing the type of wiring systems permitted in any space should be the prerogative of the NEC, which

(through its various panels and its Technical Correlating Committee) has greater expertise and a broader view than the Technical Committee on Air Conditioning (responsible for NFPA 90A). Therefore, the NEC panels should continue making their own choices regarding wiring methods. The issue of correlation (or even reference) to either NFPA 90A or the categories of plenums used in NFPA 90A should be rejected by CMP 16.

Furthermore, the reference to NFPA 90A is not appropriate in the Fine Print Note, since NFPA 90A is not a suitable standard for testing or listing wiring methods. The logical way to have a fine print note is to reference the standard used for testing the fire safety of the materials, which in this case is a combination of NFPA 255 and NFPA 259, or the UL Subject 2424 that contains all the listing requirements.

See further information in the comment I made to recommend rejection of proposal 16-112.

Panel Meeting Action: Accept

Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:

"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."

This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.

Number Eligible to Vote: 15

Ballot Results: Affirmative: 13 Abstain: 2

Comment on Affirmative:

OHDE: See my Affirmative Comment for Comment 16-34.

Explanation of Abstention:

DORNA: See my Explanation of Abstention for Comment 16-34.

KAHN: See my Explanation of Abstention on Comment 16-34.

16-513 Log #3789 NEC-P16 **Final Action: Accept**
(800.51, 800.53)

Note: See the Technical Correlating Committee Note on Comment 16-452.

Submitter: Marcelo M. Hirschler, GBH International / Rep. Fire Retardant Chemicals Association

Comment on Proposal No: 16-109

Recommendation: *Reject this proposal - Also reject the references to NFPA 90A in fine print notes and the creation of the new category of air duct cables and the subdivision of plenums. Revise the FPN to 800.51 as follows, and make no other changes.*

~~FPN: One method of defining low smoke-producing cables is by establishing an acceptable value of the smoke produced when tested in accordance with NFPA 262-1999, Standard Method of Test for Flame Travel and Smoke of Wires and Cables for Use in Air-Handling Spaces, to a maximum peak optical density of 0.5 and a maximum average optical density of 0.15. Similarly, one method of defining fire-resistant cables is by defining maximum allowable flame travel distance of 1.52 m (5 ft) when tested in accordance with the same test.~~

FPN: One method of defining a cable that is low smoke-producing cable and fire-resistant cable is that the cable exhibits a maximum peak optical density of 0.5 or less, an average optical density of 0.15 or less, and a maximum flame spread distance of 1.52 m (5 ft) or less when tested in accordance with NFPA 262, Standard Method of Test for Flame Travel and Smoke of Wires and Cables for Use in Air-Handling Spaces.

Substantiation: There is no need for a new category of CMD cables. There is also no justification for limiting the use of traditional plenum cables. It has become clear now that the expertise needed for choosing the type of wiring systems permitted in any space should be the prerogative of the NEC, which (through its various panels and its Technical Correlating Committee) has greater expertise and a broader view than the Technical Committee on Air Conditioning (responsible for NFPA 90A). Therefore, the NEC panels should continue making their own choices regarding wiring methods. The issue of correlation (or even reference) to either NFPA 90A or the categories of plenums used in NFPA 90A should be rejected by CMP 16.

Furthermore, the reference to NFPA 90A is not appropriate in the Fine Print Note, since NFPA 90A is not a suitable standard for testing or listing wiring methods. The logical way to have a fine print note is to reference the standard used for testing the fire safety of the materials, which in this case is a combination of NFPA 255 and NFPA 259, or the UL Subject 2424 that contains all the listing requirements.

See further information in the comment I made to recommend rejection of proposal 16-112.

Panel Meeting Action: Accept

Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:

"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."

This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.

Number Eligible to Vote: 15

Ballot Results: Affirmative: 13 Abstain: 2

Comment on Affirmative:

OHDE: See my Affirmative Comment for Comment 16-34.

Explanation of Abstention:

DORNA: See my Explanation of Abstention for Comment 16-34.

KAHN: See my Explanation of Abstention on Comment 16-34.

16-514 Log #2518vvv NEC-P16 **Final Action: Accept**
(800.51, 800.53(A), Table 800.50, Table 800.53)

Note: See the Technical Correlating Committee Note on Comment 16-452.

Submitter: Vince Baclawski, National Electrical Manufacturers Association (NEMA)

Comment on Proposal No: 16-121

Recommendation: Reject this proposal.

Substantiation: See our companion comment on Proposal 1-69.

Panel Meeting Action: Accept

Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:

"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."

This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.

Number Eligible to Vote: 15

Ballot Results: Affirmative: 14 Abstain: 1

Comment on Affirmative:

OHDE: See my Affirmative Comment for Comment 16-34.

Explanation of Abstention:

DORNA: See my Explanation of Abstention for Comment 16-34.

16-515 Log #1761 NEC-P16 **Final Action: Accept**
(800.51, 800.53(A), Table 800.53 and Table 800.50)

Note: See the Technical Correlating Committee Note on Comment 16-452.

Submitter: Michael I. Callanan, IBEW

Comment on Proposal No: 16-121

Recommendation: Reject this proposal.

Substantiation: This proposal should be rejected as we agree with the explanation of negative of Mr. Jensen, Mr. Jones, and Mr. Ohde. This comment represents the official position of the International Brotherhood of Electrical Workers Codes and Standards Committee.

Panel Meeting Action: Accept

Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:

"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."

This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.

Number Eligible to Vote: 15

Ballot Results: Affirmative: 14 Abstain: 1

Comment on Affirmative:

OHDE: See my Affirmative Comment for Comment 16-34.

Explanation of Abstention:

DORNA: See my Explanation of Abstention for Comment 16-34.

16-516 Log #1759 NEC-P16 **Final Action: Accept**
(800.51, 800.53 and Figure 800.53, Table 800.53 and Table 800.50)

Note: See the Technical Correlating Committee Note on Comment 16-452.
Submitter: Michael I. Callanan, IBEW
Comment on Proposal No: 16-119
Recommendation: Reject this proposal.
Substantiation: This proposal should be rejected as we agree with the explanation of negative of Mr. Jensen, Mr. Jones, and Mr. Ohde. This comment represents the official position of the International Brotherhood of Electrical Workers Codes and Standards Committee.
Panel Meeting Action: Accept
Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:
"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."
This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.
Number Eligible to Vote: 15
Ballot Results: Affirmative: 13 Abstain: 2
Comment on Affirmative:
OHDE: See my Affirmative Comment for Comment 16-34.
Explanation of Abstention:
DORNA: See my Explanation of Abstention for Comment 16-34.
KAHN: See my Explanation of Abstention on Comment 16-34.

16-517 Log #1836 NEC-P16 **Final Action: Reject**
(800.51, 800.53, Figure 800.53, And Table 800.50)

Submitter: Thomas P. Hammerberg, Automatic Fire Alarm Association
Comment on Proposal No: 16-124
Recommendation: Continue to accept in principle.
Substantiation: The Automatic Fire Alarm Association supports the panel action, which meets the submitter's intent. The panel action clarifies wiring requirements in air ducts and plenums.
Panel Meeting Action: Reject
Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:
"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."
This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.
Number Eligible to Vote: 15
Ballot Results: Affirmative: 13 Abstain: 2
Comment on Affirmative:
OHDE: See my Affirmative Comment for Comment 16-34.
Explanation of Abstention:
DORNA: See my Explanation of Abstention for Comment 16-34.
KAHN: See my Explanation of Abstention on Comment 16-34.

16-518 Log #2518jj NEC-P16 **Final Action: Accept**
(800.51, 800.53, Figure 800.53, Table 800.50)

Note: See the Technical Correlating Committee Note on Comment 16-452.
Submitter: Vince Baclawski, National Electrical Manufacturers Association (NEMA)
Comment on Proposal No: 16-114
Recommendation: Reject this proposal.
Substantiation: See our companion comment on Proposal 1-69.
Panel Meeting Action: Accept
Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:
"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."
This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.
Number Eligible to Vote: 15
Ballot Results: Affirmative: 13 Abstain: 2
Comment on Affirmative:
OHDE: See my Affirmative Comment for Comment 16-34.
Explanation of Abstention:
DORNA: See my Explanation of Abstention for Comment 16-34.
KAHN: See my Explanation of Abstention on Comment 16-34.

16-519 Log #2518rrr NEC-P16 **Final Action: Accept**
(800.51, 800.53, Figure 800.53, Table 800.50)

Note: See the Technical Correlating Committee Note on Comment 16-452.
Submitter: Vince Baclawski, National Electrical Manufacturers Association (NEMA)
Comment on Proposal No: 16-113
Recommendation: Reject this proposal.
Substantiation: See our companion comment on Proposal 1-69.
Panel Meeting Action: Accept
Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:
"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."
This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.
Number Eligible to Vote: 15
Ballot Results: Affirmative: 13 Abstain: 2
Comment on Affirmative:
OHDE: See my Affirmative Comment for Comment 16-34.
Explanation of Abstention:
DORNA: See my Explanation of Abstention for Comment 16-34.
KAHN: See my Explanation of Abstention on Comment 16-34.

16-520 Log #2518sss NEC-P16 **Final Action: Accept**
(800.51, 800.53, Figure 800.53, Table 800.50 Table 800.53)

Note: See the Technical Correlating Committee Note on Comment 16-452.
Submitter: Vince Baclawski, National Electrical Manufacturers Association (NEMA)
Comment on Proposal No: 16-116
Recommendation: Reject this proposal.
Substantiation: See our companion comment on Proposal 1-69.
Panel Meeting Action: Accept
Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:
"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."
This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.
Number Eligible to Vote: 15
Ballot Results: Affirmative: 13 Abstain: 2
Comment on Affirmative:
OHDE: See my Affirmative Comment for Comment 16-34.
Explanation of Abstention:
DORNA: See my Explanation of Abstention for Comment 16-34.
KAHN: See my Explanation of Abstention on Comment 16-34.

16-521 Log #1750 NEC-P16 **Final Action: Accept**
(800.51, 800.53, Figure 800.53, Table 800.53 and Table 800.50)

Note: See the Technical Correlating Committee Note on Comment 16-452.
Submitter: Michael I. Callanan, IBEW
Comment on Proposal No: 16-109
Recommendation: Reject this proposal.
Substantiation: This proposal should be rejected as we agree with the explanation of negative of Mr. Jensen, Mr. Jones, and Mr. Ohde. This comment represents the official position of the International Brotherhood of Electrical Workers Codes and Standards Committee.
Panel Meeting Action: Accept
Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:
"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."
This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.
Number Eligible to Vote: 15
Ballot Results: Affirmative: 13 Abstain: 2
Comment on Affirmative:
OHDE: See my Affirmative Comment for Comment 16-34.
Explanation of Abstention:
DORNA: See my Explanation of Abstention for Comment 16-34.
KAHN: See my Explanation of Abstention on Comment 16-34.

16-522 Log #1753 NEC-P16 **Final Action: Accept**
(800.51, 800.53, Figure 800.53, Table 800.53 and Table 800.50)

Note: See the Technical Correlating Committee Note on Comment 16-452.
Submitter: Michael I. Callanan, IBEW
Comment on Proposal No: 16-113
Recommendation: Reject this proposal.
Substantiation: This proposal should be rejected as we agree with the explanation of negative of Mr. Jensen, Mr. Jones, and Mr. Ohde. This comment represents the official position of the International Brotherhood of Electrical Workers Codes and Standards Committee.
Panel Meeting Action: Accept
Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:
"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."
This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.
Number Eligible to Vote: 15
Ballot Results: Affirmative: 13 Abstain: 2
Comment on Affirmative:
OHDE: See my Affirmative Comment for Comment 16-34.
Explanation of Abstention:
DORNA: See my Explanation of Abstention for Comment 16-34.
KAHN: See my Explanation of Abstention on Comment 16-34.

16-523 Log #1754 NEC-P16 **Final Action: Accept**
(800.51, 800.53, Figure 800.53, Table 800.53 and Table 800.50)

Note: See the Technical Correlating Committee Note on Comment 16-452.
Submitter: Michael I. Callanan, IBEW
Comment on Proposal No: 16-114
Recommendation: Reject this proposal.
Substantiation: This proposal should be rejected as we agree with the explanation of negative of Mr. Jensen, Mr. Jones, and Mr. Ohde. This comment represents the official position of the International Brotherhood of Electrical Workers Codes and Standards Committee.
Panel Meeting Action: Accept
Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:
"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."
This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.
Number Eligible to Vote: 15
Ballot Results: Affirmative: 13 Abstain: 2
Comment on Affirmative:
OHDE: See my Affirmative Comment for Comment 16-34.
Explanation of Abstention:
DORNA: See my Explanation of Abstention for Comment 16-34.
KAHN: See my Explanation of Abstention on Comment 16-34.

16-524 Log #1756 NEC-P16 **Final Action: Accept**
(800.51, 800.53, Figure 800.53, Table 800.53 and Table 800.50)

Note: See the Technical Correlating Committee Note on Comment 16-452.
Submitter: Michael I. Callanan, IBEW
Comment on Proposal No: 16-116
Recommendation: Reject this proposal.
Substantiation: This proposal should be rejected as we agree with the explanation of negative of Mr. Jensen, Mr. Jones, and Mr. Ohde. This comment represents the official position of the International Brotherhood of Electrical Workers Codes and Standards Committee.
Panel Meeting Action: Accept
Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:
"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."
This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.
Number Eligible to Vote: 15
Ballot Results: Affirmative: 13 Abstain: 2
Comment on Affirmative:
OHDE: See my Affirmative Comment for Comment 16-34.
Explanation of Abstention:
DORNA: See my Explanation of Abstention for Comment 16-34.
KAHN: See my Explanation of Abstention on Comment 16-34.

16-525 Log #1758 NEC-P16 **Final Action: Accept**
(800.51, 800.53, Figure 800.53, Table 800.53 and Table 800.50)

Note: See the Technical Correlating Committee Note on Comment 16-452.
Submitter: Michael I. Callanan, IBEW
Comment on Proposal No: 16-118
Recommendation: Reject this proposal.
Substantiation: This proposal should be rejected as we agree with the explanation of negative of Mr. Jensen, Mr. Jones, and Mr. Ohde. This comment represents the official position of the International Brotherhood of Electrical Workers Codes and Standards Committee.
Panel Meeting Action: Accept
Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:
"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."
This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.
Number Eligible to Vote: 15

Ballot Results: Affirmative: 13 Abstain: 2
Comment on Affirmative:
OHDE: See my Affirmative Comment for Comment 16-34.
Explanation of Abstention:
DORNA: See my Explanation of Abstention for Comment 16-34.
KAHN: See my Explanation of Abstention on Comment 16-34.

16-526 Log #1762 NEC-P16 **Final Action: Accept**
(800.51, 800.53, Figure 800.53 Table 800.53 and Table 800.50)

Note: See the Technical Correlating Committee Note on Comment 16-452.
Submitter: Michael I. Callanan, IBEW
Comment on Proposal No: 16-122
Recommendation: Reject this proposal.
Substantiation: This proposal should be rejected as we agree with the explanation of negative of Mr. Jensen, Mr. Jones, and Mr. Ohde. This comment represents the official position of the International Brotherhood of Electrical Workers Codes and Standards Committee.
Panel Meeting Action: Accept
Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:
"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."
This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.
Number Eligible to Vote: 15
Ballot Results: Affirmative: 13 Abstain: 2
Comment on Affirmative:
OHDE: See my Affirmative Comment for Comment 16-34.
Explanation of Abstention:
DORNA: See my Explanation of Abstention for Comment 16-34.
KAHN: See my Explanation of Abstention on Comment 16-34.

16-527 Log #1763 NEC-P16 **Final Action: Accept**
(800.51, 800.53, Figure 800.53, Table 800.53 and Table 800.50)

Note: See the Technical Correlating Committee Note on Comment 16-452.
Submitter: Michael I. Callanan, IBEW
Comment on Proposal No: 16-123
Recommendation: Reject this proposal.
Substantiation: This proposal should be rejected as we agree with the explanation of negative of Mr. Jensen, Mr. Jones, and Mr. Ohde. This comment represents the official position of the International Brotherhood of Electrical Workers Codes and Standards Committee.
Panel Meeting Action: Accept
Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:
"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."
This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.
Number Eligible to Vote: 15
Ballot Results: Affirmative: 13 Abstain: 2
Comment on Affirmative:
OHDE: See my Affirmative Comment for Comment 16-34.
Explanation of Abstention:
DORNA: See my Explanation of Abstention for Comment 16-34.
KAHN: See my Explanation of Abstention on Comment 16-34.

16-528 Log #1764 NEC-P16 **Final Action: Accept**
(800.51, 800.53, Figure 800.53, Table 800.53 and Table 800.50)

Note: See the Technical Correlating Committee Note on Comment 16-452.
Submitter: Michael I. Callanan, IBEW
Comment on Proposal No: 16-124
Recommendation: Reject this proposal.
Substantiation: This proposal should be rejected as we agree with the explanation of negative of Mr. Jensen, Mr. Jones, and Mr. Ohde. This comment represents the official position of the International Brotherhood of Electrical Workers Codes and Standards Committee.
Panel Meeting Action: Accept
Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:
"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."
This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.
Number Eligible to Vote: 15
Ballot Results: Affirmative: 13 Abstain: 2
Comment on Affirmative:
OHDE: See my Affirmative Comment for Comment 16-34.
Explanation of Abstention:
DORNA: See my Explanation of Abstention for Comment 16-34.
KAHN: See my Explanation of Abstention on Comment 16-34.

16-529 Log #1767 NEC-P16 **Final Action: Accept**
(800.51, 800.53, Figure 800.53, Table 800.53 and Table 800.50)

Note: See the Technical Correlating Committee Note on Comment 16-452.
Submitter: Michael I. Callanan, IBEW
Comment on Proposal No: 16-127
Recommendation: Reject this proposal.
Substantiation: This proposal should be rejected as we agree with the explanation of negative of Mr. Jensen, Mr. Jones, and Mr. Ohde. This comment represents the official position of the International Brotherhood of Electrical Workers Codes and Standards Committee.
Panel Meeting Action: Accept
Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:
"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."
This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.
Number Eligible to Vote: 15
Ballot Results: Affirmative: 13 Abstain: 2
Comment on Affirmative:
OHDE: See my Affirmative Comment for Comment 16-34.
Explanation of Abstention:
DORNA: See my Explanation of Abstention for Comment 16-34.
KAHN: See my Explanation of Abstention on Comment 16-34.

16-530 Log #2893 NEC-P16 **Final Action: Reject**
(800.51, 800.53, Figure 800.53, Tables 800.50, and 800.53)

Note: See the Technical Correlating Committee Note on Comment 16-452.
Submitter: Stanley Kaufman, CableSafe, Inc.
Comment on Proposal No: 16-112
Recommendation: Continue to accept proposal 16-112 in principle with the text as shown below.

800.154 Applications of Listed Communications Wires and Cables and Communications Raceways. Communications wires and cables shall comply with the requirements of 800.154(A) through (F) or where cable substitutions are made in accordance with 800.154(G).

(A) Air Ducts and Plenums Cables installed in air ducts and plenums shall comply with the applicable requirements of (1) or (2) below.

(1) Air Ducts. Cables installed in air ducts shall be Type CMD and shall be associated with the air duct system. Types CMD, CMP, CMR, CMG, CM, and CMX and communications wire installed in compliance with Section 300.22(B) shall be permitted.

(2) Plenums. Cables installed in plenums shall comply with (a) or (b) below.

(a) Cables installed in plenums, other than ceiling cavity plenums and raised floor plenums, shall be Type CMD and shall be associated with the plenum system. Where installed in an air-handling unit room plenum, Type CMD cable shall be mechanically protected to a height of 7 feet above the floor. Types CMD, CMP, CMR, CMG, CM, and CMX and communications wire installed in compliance with Section 300.22(B) shall be permitted.

(b) Cables installed in accessible ceiling cavity plenums and accessible raised floor plenums shall be Type CMD or CMP. Cables installed in inaccessible ceiling cavity plenums and inaccessible raised floor plenums shall be Type CMD. Types CMD, CMP, CMR, CMG, CM, and CMX and communications wire installed in compliance with 300.22(C) shall be permitted. Listed plenum

communications raceways shall be permitted to be installed in ceiling cavity plenums and raised floor plenums. Only Type CMD or CMP cable shall be permitted to be installed in these raceways.

FPN: Plenums described in NFPA 90A-2002, *Standard for the Installation of Air-Conditioning and Ventilating Systems,* include air-handling unit room plenums, apparatus casing plenums, duct distribution plenums, ceiling cavity plenums, and raised floor plenums.

(B) Riser. Cables installed in risers shall comply with 800.154(B)(1), (B)(2), or (B)(3).

(1) **Cables in Vertical Runs.** Cables installed in vertical runs and penetrating more than one floor, or cables installed in vertical runs in a shaft, shall be Type CMR. Floor penetrations requiring Type CMR shall contain only cables suitable for air duct, plenum or riser use. Listed riser communications raceways shall be permitted to be installed in vertical riser runs in a shaft from floor to floor. Only Type CMD, CMP and CMR cables shall be permitted to be installed in these raceways.

(2) **Metal Raceways or Fireproof Shafts.** Listed communications cables shall be encased in a metal raceway or located in a fireproof shaft having firestops at each floor.

(3) **One- and Two-Family Dwellings.** Type CM and CMX cable shall be permitted in one- and two-family dwellings.

FPN: See 800.3(C) for firestop requirements for floor penetrations.

(C) Distributing Frames and Cross-Connect Arrays. Listed communications wire and Types CMD, CMP, CMR, CMG, and CM communications cables shall be used in distributing frames and cross-connect arrays.

(D) Cable Trays. Types CMD, CMP, CMR, CMG, and CM communications cables shall be permitted to be installed in cable trays. Communications raceways, as described in 800.83, shall be permitted to be installed in cable trays.

(E) Other Wiring Within Buildings. Cables installed in building locations other than the locations covered in 800.154(A) through (D) shall be in accordance with 800.154(E)(1) through (E)(6).

(1) **General.** Cables shall be Type CMG or Type CM. Listed communications general-purpose raceways shall be permitted. Only Types CMD, CMP, CMR, CMG, or CM cables shall be permitted to be installed in general-purpose communications raceways.

(2) **In Raceways.** Listed communications wires that are enclosed in a raceway of a type included in Chapter 3 shall be permitted.

(3) **Nonconcealed Spaces**. Type CMX communications cable shall be permitted to be installed in nonconcealed spaces where the exposed length of cable does not exceed 3 m (10 ft).

(4) **One- and Two-Family Dwellings.** Type CMX communications cable less than 6 mm (0.25 in.) in diameter shall be permitted to be installed in one- and two-family dwellings

(5) **Multi-Family Dwellings.** Type CMX communications cable less than 6 mm (0.25 in.) in diameter shall be permitted to be installed in nonconcealed spaces in multi-family dwellings.

(6) **Under Carpets.** Type CMUC undercarpet communications wires and cables shall be permitted to be installed under carpet.

(F) Hybrid Power and Communications Cable. Hybrid power and communications cable listed in accordance with 800.179(I) shall be permitted to be installed in one- and two-family dwellings.

(G) Cable Substitutions. The uses and permitted substitutions for communications cables listed in Table 800.154 shall be considered suitable for the purpose and shall be permitted.

FPN: For information on Types CMD, CMP, CMR, CMG, CM, and CMX cables, see 800.179.

Table 800.154 Cable Substitutions

Cable Type	Permitted Substitutions
CMD	NONE
CMP	CMD,
CMR	CMD, CMP,
CMG, CM	CMD, CMP, CMR,
CMX	CMD, CMP, CMR, CMG, CM

Note: See Figure 800.154. Cable Substitution hierarchy.

See Figure 800.154 on the following page

800.179 Communications Wires and Cables. Communications wires and cables shall have a voltage rating of not less than 300 volts and shall be listed in accordance with 800.179(A) through (I) and marked in accordance with Table 800.179. The cable voltage rating shall not be marked on the cable or on the undercarpet communications wire. Conductors in communications cables, other than in a coaxial cable, shall be copper.

FPN: Voltage markings on cables may be misinterpreted to suggest that the cables may be suitable for Class 1, electric light, and power applications.

Exception: Voltage markings shall be permitted where the cable has multiple listings and voltage marking is required for one or more of the listings.

(A) Type CMD. Type CMD communications air duct cable shall be listed as being suitable for use in ducts, plenums, and other space used for environmental air and shall also be listed as having a low potential heat value, low flame spread characteristics, and very low smoke-producing characteristics.

FPN: One method of defining a low potential heat cable is establishing an acceptable value of potential heat when tested in accordance with NFPA 259, *Standard Test Method for Potential Heat of Building Materials*, to a maximum potential heat value not exceeding 8141 kJ/kg (3500 BTU/lb). One method of defining low flame spread cable is establishing an acceptable value of flame spread when tested in accordance with NFPA 255, *Standard Method of Test of Surface Burning Characteristics of Building Materials,* to a maximum flame spread index of 25. Similarly, one method of defining very low smoke-producing cable is establishing an acceptable value when tested in accordance with NFPA 255, *Standard Method of Test of Surface Burning Characteristics of Building Materials,* to maximum smoke developed index of 50. These test methods and resultant values correlate with the requirements of NFPA 90A-2002, *Standard for the Installation of Air-Conditioning and Ventilating System* for materials installed in ducts and plenums.

(B) Type CMP. Type CMP communications plenum cable shall be listed as being suitable for use in ceiling cavity plenums and raised floor plenums and shall also be listed as having adequate fire-resistant and low smoke-producing characteristics.

FPN: For a definition of "adequate fire-resistant and low smoke-producing characteristics" refer to NFPA 90A, *Standard for the Installation of Air-Conditioning and Ventilating Systems,* which through its listing requirements for plenum cables, effectively defines cables having "adequate fire-resistant characteristics" as cables having a maximum flame spread distance of 5 ft (1.5 m) or less when tested in accordance with NFPA 262 *Standard Method of Test for Flame Travel and Smoke of Wires and Cables for Use in Air-Handling Spaces*. Likewise, it effectively defines cables having "low smoke-producing characteristics" as cables having a maximum peak optical density of 0.5 or less and an average optical density of 0.15 or less in the NFPA 262 test.

(C) Type CMR. Type CMR communications riser cable shall be listed as being suitable for use in a vertical run in a shaft or from floor to floor and shall also be listed as having fire-resistant characteristics capable of preventing the carrying of fire from floor to floor.

FPN: One method of defining fire-resistant characteristics capable of preventing the carrying of fire from floor to floor is that the cables pass the requirements of ANSI/UL 1666-1997, Standard Test for Flame Propagation Height of Electrical and Optical-Fiber Cable Installed Vertically in Shafts.

(D) Type CMG. Type CMG general-purpose communications cable shall be listed as suitable for general-purpose use, with the exception of air ducts, risers, plenums, and other spaces used for environmental air, and shall also be listed as being resistant to the spread of fire.

FPN: One method of defining resistant to the spread of fire is for the damage (char length) not to exceed 1.5 m (4 ft 11 in.) when performing the vertical flame test for cables in cable trays, as described in CSA C22.2 No. 0.3-M 1985, Test Methods for Electrical Wires and Cables.

(E) Type CM. Type CM general-purpose communications cable shall be listed as suitable for general-purpose use, with the exception of air ducts, risers, plenums, and other spaces used for environmental air, and shall also be listed as being resistant to the spread of fire.

FPN: One method of defining resistant to the spread of fire is that the cables do not spread fire to the top of the tray in the vertical-tray flame test in ANSI/UL 1581-1991, Reference Standard for Electrical Wires, Cables and Flexible Cords. Another method of defining resistant to the spread of fire is for the damage (char length) not to exceed 1.5 m (4 ft 11 in.) when performing the vertical flame test for cables in cable trays, as described in CSA C22.2 No. 0.3-M-1985, Test Methods for Electrical Wires and Cables.

(F) Type CMX. Type CMX limited-use communications cable shall be listed as being suitable for use in dwellings and for use in raceway and shall also be listed as being resistant to flame spread.

FPN: One method of determining that cable is resistant to flame spread is by testing the cable to the VW-1 (vertical-wire) flame test in ANSI/UL 1581-1991, Reference Standard for Electrical Wires, Cables and Flexible Cords.

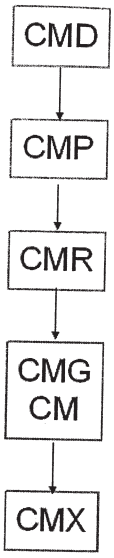
(G) Type CMUC UnderCarpet Wire and Cable. Type CMUC undercarpet communications wire and cable shall be listed as being suitable for undercarpet use and shall also be listed as being resistant to flame spread.

FPN: One method of determining that cable is resistant to flame spread is by testing the cable to the VW-1 (vertical-wire) flame test in ANSI/UL 1581-1991, Reference Standard for Electrical Wires, Cables and Flexible Cords.

(H) Communications Wires. Communications wires, such as distributing frame wire and jumper wire, shall be listed as being resistant to the spread of fire.

FPN: One method of defining resistant to the spread of fire is that the cables do not spread fire to the top of the tray in the vertical-tray flame test in ANSI/UL 1581-1991, Reference Standard for Electrical Wires, Cables and Flexible Cords. Another method of defining resistant to the spread of fire is for the damage (char length) not to exceed 1.5 m (4 ft 11 in.) when performing the vertical flame test for cables in cable trays, as described in CSA C22.2 No. 0.3-M-1985, Test Methods for Electrical Wires and Cables.

(I) Hybrid Power and Communications Cable. Listed hybrid power and communications cable shall be permitted where the power cable is a listed Type NM or NM-B conforming to the provisions of Article 334, and the communications cable is a listed Type CM, the jackets on the listed NM or NM-B and listed CM cables are rated for 600 volts minimum, and the hybrid cable is listed as being resistant to the spread of fire.



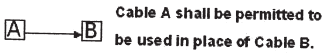


Figure 800.154 Cable Substitution Hierarchy

FPN: One method of defining resistant to the spread of fire is that the cables do not spread fire to the top of the tray in the vertical-tray flame test in ANSI/UL 1581-1991, Reference Standard for Electrical Wires, Cables and Flexible Cords. Another method of defining resistant to the spread of fire is for the damage (char length) not to exceed 1.5 m (4 ft 11 in.) when performing the vertical flame test for cables in cable trays, as described in CSA C22.2 No. 0.3-M-1985, Test Methods for Electrical Wires and Cables.

Table 800.82, Cable markings

Cable Marking	Type
CMD	Communications air duct cable
CMP	Communications plenum cable
CMR	Communications riser cable
CMG	Communications general-purpose cable
CM	Communications general-purpose cable
CMX	Communications limited-use cable
CMUC	Undercarpet communications wire and cable

FPN: Cable types are listed in descending order of fire resistance rating.
Substantiation: The suggested text contains the following changes from the text accepted by panel sixteen's action on proposal 16-112:
1) The sections have been renumbered to use the numbering scheme proposed by the renumbering task group that was established in response to the TCC directive on proposals 3-126 and 3-223.
2) "G" cables have been restored because TCC action on proposal 16-28 required G cables to remain in the code. "G" cables were in the original proposal.
3) The installation requirements for risers were revised to permit air duct cable in a riser.
4) The fine print note for listing plenum cables was revised to use the text suggested by the Technical Committee on Air Conditioning in their comment on proposal 16-128.
5) The listing requirement for general-purpose cables was revised to add "air ducts" to the list of spaces these cables are not listed for.
Panel Meeting Action: Reject
Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:
"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."
This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.
Number Eligible to Vote: 15
Ballot Results: Affirmative: 13 Abstain: 2
Comment on Affirmative:
OHDE: See my Affirmative Comment for Comment 16-34.
Explanation of Abstention:
DORNA: See my Explanation of Abstention for Comment 16-34.
KAHN: See my Explanation of Abstention on Comment 16-34.

16-531 Log #2518ttt NEC-P16 **Final Action: Accept**
(800.51, 800.53, Table 800.50, Table 800.53)

Note: See the Technical Correlating Committee Note on Comment 16-452.
Submitter: Vince Baclawski, National Electrical Manufacturers Association (NEMA)
Comment on Proposal No: 16-117
Recommendation: Reject this proposal.
Substantiation: See our companion comment on Proposal 1-69.
Panel Meeting Action: Accept
Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:
"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."
This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.
Number Eligible to Vote: 15
Ballot Results: Affirmative: 13 Abstain: 2
Comment on Affirmative:
OHDE: See my Affirmative Comment for Comment 16-34.
Explanation of Abstention:
DORNA: See my Explanation of Abstention for Comment 16-34.
KAHN: See my Explanation of Abstention on Comment 16-34.

16-532 Log #2518iiii NEC-P16 **Final Action: Accept**
(800.51, 800.53, Table 800.50, Table 800.53)

Note: See the Technical Correlating Committee Note on Comment 16-452.
Submitter: Vince Baclawski, National Electrical Manufacturers Association (NEMA)
Comment on Proposal No: 16-120
Recommendation: Reject this proposal.
Substantiation: See our companion comment on Proposal 1-69.
Panel Meeting Action: Accept
Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:
"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."
This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.

Number Eligible to Vote: 15
Ballot Results: Affirmative: 13 Abstain: 2
Comment on Affirmative:
OHDE: See my Affirmative Comment for Comment 16-34.
Explanation of Abstention:
DORNA: See my Explanation of Abstention for Comment 16-34.
KAHN: See my Explanation of Abstention on Comment 16-34.

16-533 Log #2518uuu NEC-P16 **Final Action: Accept**
(800.51, 800.53, Table 800.50, Table 800.53, Figure 800.53)

Note: See the Technical Correlating Committee Note on Comment 16-452.
Submitter: Vince Baclawski, National Electrical Manufacturers Association (NEMA)
Comment on Proposal No: 16-119
Recommendation: Reject this proposal.
Substantiation: See our companion comment on Proposal 1-69.
Panel Meeting Action: Accept
Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:
"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."
This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.
Number Eligible to Vote: 15
Ballot Results: Affirmative: 13 Abstain: 2
Comment on Affirmative:
OHDE: See my Affirmative Comment for Comment 16-34.
Explanation of Abstention:
DORNA: See my Explanation of Abstention for Comment 16-34.
KAHN: See my Explanation of Abstention on Comment 16-34.

16-534 Log #2518www NEC-P16 **Final Action: Accept**
(800.51, 800.53, Table 800.50, Table 800.53, Figure 800.53)

Note: See the Technical Correlating Committee Note on Comment 16-452.
Submitter: Vince Baclawski, National Electrical Manufacturers Association (NEMA)
Comment on Proposal No: 16-123
Recommendation: Reject this proposal.
Substantiation: See our companion comment on Proposal 1-69.
Panel Meeting Action: Accept
Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:
"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."
This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.
Number Eligible to Vote: 15
Ballot Results: Affirmative: 13 Abstain: 2
Comment on Affirmative:
OHDE: See my Affirmative Comment for Comment 16-34.
Explanation of Abstention:
DORNA: See my Explanation of Abstention for Comment 16-34.
KAHN: See my Explanation of Abstention on Comment 16-34.

16-535 Log #2518hhhh NEC-P16 **Final Action: Accept**
(800.51, 800.53, Table 800.50, Table 800.53, Figure 800.53)

Note: See the Technical Correlating Committee Note on Comment 16-452.
Submitter: Vince Baclawski, National Electrical Manufacturers Association (NEMA)
Comment on Proposal No: 16-118
Recommendation: Reject this proposal.
Substantiation: See our companion comment on Proposal 1-69.
Panel Meeting Action: Accept
Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:
"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."
This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.
Number Eligible to Vote: 15
Ballot Results: Affirmative: 13 Abstain: 2
Comment on Affirmative:
OHDE: See my Affirmative Comment for Comment 16-34.
Explanation of Abstention:
DORNA: See my Explanation of Abstention for Comment 16-34.
KAHN: See my Explanation of Abstention on Comment 16-34.

16-536 Log #2518jjjj NEC-P16 **Final Action: Accept**
(800.51, 800.53, Table 800.50, Table 800.53, Figure 800.53)

Note: See the Technical Correlating Committee Note on Comment 16-452.
Submitter: Vince Baclawski, National Electrical Manufacturers Association (NEMA)
Comment on Proposal No: 16-122
Recommendation: Reject this proposal.
Substantiation: See our companion comment on Proposal 1-69.
Panel Meeting Action: Accept
Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:
"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."
This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.
Number Eligible to Vote: 15
Ballot Results: Affirmative: 13 Abstain: 2
Comment on Affirmative:
OHDE: See my Affirmative Comment for Comment 16-34.
Explanation of Abstention:
DORNA: See my Explanation of Abstention for Comment 16-34.
KAHN: See my Explanation of Abstention on Comment 16-34.

16-537 Log #2518kkkk NEC-P16 **Final Action: Accept**
(800.51, 800.53, Table 800.50, Table 800.53, Figure 800.53)

Note: See the Technical Correlating Committee Note on Comment 16-452.
Submitter: Vince Baclawski, National Electrical Manufacturers Association (NEMA)
Comment on Proposal No: 16-124
Recommendation: Reject this proposal.
Substantiation: See our companion comment on Proposal 1-69.
Panel Meeting Action: Accept
Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:
"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."
This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.

Number Eligible to Vote: 15
Ballot Results: Affirmative: 13 Abstain: 2
Comment on Affirmative:
OHDE: See my Affirmative Comment for Comment 16-34.
Explanation of Abstention:
DORNA: See my Explanation of Abstention for Comment 16-34.
KAHN: See my Explanation of Abstention on Comment 16-34.

16-538 Log #1749 NEC-P16 **Final Action: Accept**
(800.51, 800.53, Table 800.53 and Table 800.50)

Note: See the Technical Correlating Committee Note on Comment 16-452.
Submitter: Michael I. Callanan, IBEW
Comment on Proposal No: 16-108
Recommendation: This proposal should be rejected as we agree with the explanation of negative of Mr. Jensen, Mr. Jones, and Mr. Ohde. This comment represents the official position of the International Brotherhood of Electrical Workers Codes and Standards Committee.
Substantiation: This proposal should be rejected as we agree with the explanation of negative of Mr. Jensen, Mr. Jones, and Mr. Ohde. This comment represents the official position of the International Brotherhood of Electrical Workers Codes and Standards Committee.
Panel Meeting Action: Accept
Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:
"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."
This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.
Number Eligible to Vote: 15
Ballot Results: Affirmative: 13 Abstain: 2
Comment on Affirmative:
OHDE: See my Affirmative Comment for Comment 16-34.
Explanation of Abstention:
DORNA: See my Explanation of Abstention for Comment 16-34.
KAHN: See my Explanation of Abstention on Comment 16-34.

16-539 Log #1751 NEC-P16 **Final Action: Accept**
(800.51, 800.53, Table 800.53 and Table 800.50)

Note: See the Technical Correlating Committee Note on Comment 16-452.
Submitter: Michael I. Callanan, IBEW
Comment on Proposal No: 16-111
Recommendation: Reject this proposal.
Substantiation: This proposal should be rejected as we agree with the explanation of negative of Mr. Jensen, Mr. Jones, and Mr. Ohde. This comment represents the official position of the International Brotherhood of Electrical Workers Codes and Standards Committee.
Panel Meeting Action: Accept
Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:
"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."
This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.
Number Eligible to Vote: 15
Ballot Results: Affirmative: 13 Abstain: 2
Comment on Affirmative:
OHDE: See my Affirmative Comment for Comment 16-34.
Explanation of Abstention:
DORNA: See my Explanation of Abstention for Comment 16-34.
KAHN: See my Explanation of Abstention on Comment 16-34.

16-540 Log #1757 NEC-P16 **Final Action: Accept**
(800.51, 800.53, Table 800.53 and Table 800.50)

Note: See the Technical Correlating Committee Note on Comment 16-452.
Submitter: Michael I. Callanan, IBEW
Comment on Proposal No: 16-117
Recommendation: Reject this proposal.
Substantiation: This proposal should be rejected as we agree with the explanation of negative of Mr. Jensen, Mr. Jones, and Mr. Ohde. This comment represents the official position of the International Brotherhood of Electrical Workers Codes and Standards Committee.
Panel Meeting Action: Accept
Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:
"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."
This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.
Number Eligible to Vote: 15
Ballot Results: Affirmative: 13 Abstain: 2
Comment on Affirmative:
OHDE: See my Affirmative Comment for Comment 16-34.
Explanation of Abstention:
DORNA: See my Explanation of Abstention for Comment 16-34.
KAHN: See my Explanation of Abstention on Comment 16-34.

16-541 Log #1760 NEC-P16 **Final Action: Accept**
(800.51, 800.53, Table 800.53 and Table 800.50)

Note: See the Technical Correlating Committee Note on Comment 16-452.
Submitter: Michael I. Callanan, IBEW
Comment on Proposal No: 16-120
Recommendation: Reject this proposal.
Substantiation: This proposal should be rejected as we agree with the explanation of negative of Mr. Jensen, Mr. Jones, and Mr. Ohde. This comment represents the official position of the International Brotherhood of Electrical Workers Codes and Standards Committee.
Panel Meeting Action: Accept
Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:
"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."
This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.
Number Eligible to Vote: 15
Ballot Results: Affirmative: 13 Abstain: 2
Comment on Affirmative:
OHDE: See my Affirmative Comment for Comment 16-34.
Explanation of Abstention:
DORNA: See my Explanation of Abstention for Comment 16-34.
KAHN: See my Explanation of Abstention on Comment 16-34.

16-542 Log #2319 NEC-P16 **Final Action: Accept**
(800.51 and 800.53)

Note: See the Technical Correlating Committee Note on Comment 16-452.
Submitter: Frank Bisbee, Communication Planning Corporation
Comment on Proposal No: 16-108
Recommendation: Reject this proposal.
Substantiation: In recognizing the use of "duct cable" or "limited combustible cable," the proposal fails to consider toxicity of the newly specified product and the relative incapacitation factor presented by the chemical constituents of the polymer in new cable design. A recent study by the NFPA Fire Protection Research Foundation has advanced an international effort to make certain that people can escape a burning building before being incapacitated (overcome by smoke or gases generated by thermal decomposition). The work is part of a revolution in fire safety in which codes and standards are beginning to address how much smoke, or gases generated by thermal decomposition, will incapacitate people, rather than how much will kill them.
The jacketing and insulating materials used in duct cable and limited combustible cable are subject to heat decomposition and the emission of sub-lethal toxic fumes. Some of these fumes can incapacitate (blinding and

choking) the building occupants. The requirements for using "duct cable" have failed to recognize toxicity or emissions that are essentially colorless (i.e. hydrogen fluoride, which converts to hydrofluoric acid upon contact with any moisture, and other toxic gases may be generated).

In 2002, the ISO (International Organization for Standardization), a network of the industrial-standards institutes of 147 countries, put forth a new standard calling for attention to the "sub-lethal" effects of smoke - when the heat, the thickness of smoke, and the toxic gases in smoke will block vision, make a person choke or tear up, or render a person unconscious. Because of this new ISO standard, these effects of smoke are supposed to be taken into account when regulating the size and placement of exits and the types of materials allowed in buildings. But to meet the standard, one needs to know more about the smoke produced by burning various materials. Working with the National Institute of Standards and Technology, the FPRF is laying the scientific groundwork needed to put the new standard into practice. The foundation recently completed the project's second phase of its International study of the Sub-lethal Effects of Fire Smoke on Survivability and Health. In the most recent phase of the study, the foundation's researchers performed three tests: They burned a sofa made of upholstered cushions on a steel frame, some particle board bookcases, and some household cable. In each case, the materials were burned in a room with a long adjacent corridor. The researchers measured the toxic gases emitted by each item, and how quickly the gases filled the room and moved down the corridor. They determined when and where in the room and in the hallway people would have to stop because of the smoke or the heat. Fire-test laboratories and manufacturers are expected to use this data to develop smaller-scale tests that can be done in a laboratory, so they won't need to set a room on fire every time they test a product. FPRF is uniquely equipped to conduct such studies, and NFPA officials expect more lives to be saved because of the new fire-safety standards that will emerge from this work.

By allowing and specifying the use of "duct cable," this proposal supports the use of materials counter to the findings already available in the public domain regarding sub-lethal toxicity of hydrogen fluoride and through the NFPA Fire Protection Research Foundation regarding incapacitation factors. Polymers used in duct cable and other limited combustible cable materials far exceed the incapacitation factor of other materials used in various cable construction both in generation of sub-lethal constituents and in hypertoxicity.

Panel Meeting Action: Accept

Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:

"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."

This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.

Number Eligible to Vote: 15

Ballot Results: Affirmative: 13 Abstain: 2

Comment on Affirmative:

OHDE: See my Affirmative Comment for Comment 16-34.

Explanation of Abstention:

DORNA: See my Explanation of Abstention for Comment 16-34.

KAHN: See my Explanation of Abstention on Comment 16-34.

16-543 Log #2200 NEC-P16 **Final Action: Accept**
(800.51, Table 800-50, 800-53(A) and Table 800-53)

Submitter: T. David Mills, Bechtel Savannah River, Inc.

Comment on Proposal No: 16-110

Recommendation: Reject proposal in its entirety.

Substantiation:NFPA 90A - 2002 only places a restriction for cables and for testing per NFPA 262 for ceiling cavity plenums (4.3.10.2.6.1) and raised floor plenums (4.3.10.6.5.1). It does not state that these are the only places that this plenum rated cable can be used.

The other sections of NFPA 90A related to all other air spaces including "air ducts" are silent with respect to cable requirements. This indicates plenum rated cables can be placed anywhere in the air conditioning air handling system without any new "Duct" designator. There are not any other requirements in NFPA 90A to indicate anywhere that a "does not correlate" situation exists between NFPA 70 and NFPA 90A.There is no need for any additional environmental air space identifiers or cable type designators.

Panel Meeting Action: Accept

Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:

"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."

This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.

Number Eligible to Vote: 15

Ballot Results: Affirmative: 13 Abstain: 2

Comment on Affirmative:

OHDE: See my Affirmative Comment for Comment 16-34.

Explanation of Abstention:

DORNA: See my Explanation of Abstention for Comment 16-34.

KAHN: See my Explanation of Abstention on Comment 16-34.

16-544 Log #2206 NEC-P16 **Final Action: Accept**
(800.51, Table 800-50, 800-53 and Table 800-53)

Note: See the Technical Correlating Committee Note on Comment 16-452.

Submitter: T. David Mills, Bechtel Savannah River, Inc.

Comment on Proposal No: 16-117

Recommendation: Reject Proposal in its entirety.

Substantiation:NFPA 90A - 2002 only places a restriction for cables and for testing per NFPA 262 for ceiling cavity plenums (4.3.10.2.6.1) and raised floor plenums (4.3.10.6.5.1). It does not state that these are the only places that this plenum rated cable can be used.

The other sections of NFPA 90A related to all other air spaces including "air ducts" are silent with respect to cable requirements. This indicates plenum rated cables can be placed anywhere in the air conditioning air handling system without any new "Duct" designator. There are not any other requirements in NFPA 90A to indicate anywhere that a "does not correlate" situation exists between NFPA 70 and NFPA 90A.There is no need for any additional environmental air space identifiers or cable type designators.

Panel Meeting Action: Accept

Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:

"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."

This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.

Number Eligible to Vote: 15

Ballot Results: Affirmative: 13 Abstain: 2

Comment on Affirmative:

OHDE: See my Affirmative Comment for Comment 16-34.

Explanation of Abstention:

DORNA: See my Explanation of Abstention for Comment 16-34.

KAHN: See my Explanation of Abstention on Comment 16-34.

16-545 Log #2208 NEC-P16 **Final Action: Accept**
(800.51, Table 800-50, 800-53 and Table 800-53)

Note: See the Technical Correlating Committee Note on Comment 16-452.

Submitter: T. David Mills, Bechtel Savannah River, Inc.

Comment on Proposal No: 16-108

Recommendation: Reject proposal in its entirety.

Substantiation:NFPA 90A - 2002 only places a restriction for cables and for testing per NFPA 262 for ceiling cavity plenums (4.3.10.2.6.1) and raised floor plenums (4.3.10.6.5.1). It does not state that these are the only places that this plenum rated cable can be used.

The other sections of NFPA 90A related to all other air spaces including "air ducts" are silent with respect to cable requirements. This indicates plenum rated cables can be placed anywhere in the air conditioning air handling system without any new "Duct" designator. There are not any other requirements in NFPA 90A to indicate anywhere that a "does not correlate" situation exists between NFPA 70 and NFPA 90A.There is no need for any additional environmental air space identifiers or cable type designators.

Panel Meeting Action: Accept

Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:

"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."

This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.

Number Eligible to Vote: 15
Ballot Results: Affirmative: 13 Abstain: 2
Comment on Affirmative:
OHDE: See my Affirmative Comment for Comment 16-34.
Explanation of Abstention:
DORNA: See my Explanation of Abstention for Comment 16-34.
KAHN: See my Explanation of Abstention on Comment 16-34.

16-546 Log #2209 NEC-P16 **Final Action: Accept**
(800.51, Table 800-50, 800-53 and Table 800-53)

Note: See the Technical Correlating Committee Note on Comment 16-452.
Submitter: T. David Mills, Bechtel Savannah River, Inc.
Comment on Proposal No: 16-111
Recommendation: Reject proposal in its entirety.
Substantiation:NFPA 90A - 2002 only places a restriction for cables and for testing per NFPA 262 for ceiling cavity plenums (4.3.10.2.6.1) and raised floor plenums (4.3.10.6.5.1). It does not state that these are the only places that this plenum rated cable can be used.
The other sections of NFPA 90A related to all other air spaces including "air ducts" are silent with respect to cable requirements. This indicates plenum rated cables can be placed anywhere in the air conditioning air handling system without any new "Duct" designator. There are not any other requirements in NFPA 90A to indicate anywhere that a "does not correlate" situation exists between NFPA 70 and NFPA 90A.There is no need for any additional environmental air space identifiers or cable type designators.
Panel Meeting Action: Accept
Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:

"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."

This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.

Number Eligible to Vote: 15
Ballot Results: Affirmative: 13 Abstain: 2
Comment on Affirmative:
OHDE: See my Affirmative Comment for Comment 16-34.
Explanation of Abstention:
DORNA: See my Explanation of Abstention for Comment 16-34.
KAHN: See my Explanation of Abstention on Comment 16-34.

16-547 Log #2210 NEC-P16 **Final Action: Accept**
(800.51, Table 800-50, 800-53 and Table 800-53)

Note: See the Technical Correlating Committee Note on Comment 16-452.
Submitter: T. David Mills, Bechtel Savannah River, Inc.
Comment on Proposal No: 16-120
Recommendation: Reject proposal in its entirety.
Substantiation:NFPA 90A - 2002 only places a restriction for cables and for testing per NFPA 262 for ceiling cavity plenums (4.3.10.2.6.1) and raised floor plenums (4.3.10.6.5.1). It does not state that these are the only places that this plenum rated cable can be used.
The other sections of NFPA 90A related to all other air spaces including "air ducts" are silent with respect to cable requirements. This indicates plenum rated cables can be placed anywhere in the air conditioning air handling system without any new "Duct" designator. There are not any other requirements in NFPA 90A to indicate anywhere that a "does not correlate" situation exists between NFPA 70 and NFPA 90A.There is no need for any additional environmental air space identifiers or cable type designators.
Panel Meeting Action: Accept
Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:

"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."

This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.

Number Eligible to Vote: 15
Ballot Results: Affirmative: 13 Abstain: 2
Comment on Affirmative:
OHDE: See my Affirmative Comment for Comment 16-34.
Explanation of Abstention:
DORNA: See my Explanation of Abstention for Comment 16-34.
KAHN: See my Explanation of Abstention on Comment 16-34.

16-548 Log #2449 NEC-P16 **Final Action: Accept**
(800.51, Table 800-50, 800-53 and Table 800-53)

Note: See the Technical Correlating Committee Note on Comment 16-452.
Submitter: William A. Wolfe, Steel Tube Institute of North America
Comment on Proposal No: 16-108
Recommendation: Reject this proposal.
Substantiation:
See our companion proposal on 16-37.
Panel Meeting Action: Accept
Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:

"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."

This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.

Number Eligible to Vote: 15
Ballot Results: Affirmative: 13 Abstain: 2
Comment on Affirmative:
OHDE: See my Affirmative Comment for Comment 16-34.
Explanation of Abstention:
DORNA: See my Explanation of Abstention for Comment 16-34.
KAHN: See my Explanation of Abstention on Comment 16-34.

16-549 Log #2451 NEC-P16 **Final Action: Accept**
(800.51, Table 800-50, 800-53, and Table 800-53)

Note: See the Technical Correlating Committee Note on Comment 16-452.
Submitter: William A. Wolfe, Steel Tube Institute of North America
Comment on Proposal No: 16-111
Recommendation: Reject this proposal.
Substantiation: See our companion proposal on 16-37.
Panel Meeting Action: Accept
Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:

"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."

This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.

Number Eligible to Vote: 15
Ballot Results: Affirmative: 13 Abstain: 2
Comment on Affirmative:
OHDE: See my Affirmative Comment for Comment 16-34.
Explanation of Abstention:
DORNA: See my Explanation of Abstention for Comment 16-34.
KAHN: See my Explanation of Abstention on Comment 16-34.

16-550 Log #2801 NEC-P16 **Final Action: Reject**
(800.51, Table 800-50, 800-53 and Table 800-53)

Submitter: Richard P. Owen, City of St. Paul, Minnesota
Comment on Proposal No: 16-108
Recommendation: Continue to accept in principle.
Substantiation: The Panel 3/Panel 16 Task Group, appointed by the NEC TCC, developed this comment.

The task group agrees with Panel 16's action and statement.

The NEC TCC Task Group on Correlation Issues Between Panels 3 and 16 met three times via teleconference calls. The assignment by the TCC Chairman was to attempt to develop a resolution and accompanying comments for the different actions taken on proposals dealing with similar issues by CMP 3 and CMP 16 for their respective Articles in Chapters 7 and 8 of the NEC.

The Task Group studied the issues and determined that there were five major differences in the actions on proposals concerning Articles 725, 760, 770, 800, 820, and 830. The voting on these issues was not unanimous but did pass as at least a simple majority of the Task Group.

One of the major differences involved installing air duct cables in a fabricated air duct without enclosing the cable in a metal raceway.

The Task Group members who attended the teleconference call voted to accept text that permits "air duct cable" to be installed in fabricated ducts without enclosing in an additional metal raceway or metal cable. The text to be accepted by Panel 3 is recommended to be similar to that found in Proposals 3-194 for Article 725 and 3-288 for Article 760. The "air duct cable" will replace the plenum cable that was previously acceptable in fabricated duct without enclosing in a metal raceway or metal cable assembly.

The following members of Panels 3 and 16 participated in this Task Group assignment: From Panel 3, Mr. Sanford E. Egesdal representing the Automatic Fire Alarm Association, Inc., Mr. Ronald E. Maassen representing the National Electrical Contractors Association, and Mr. Mark C. Ode representing Underwriters Laboratories Inc. From Panel 16, Mr. Robert W. Jensen representing the Building Industry Consulting Services International, Mr. Harold C. Ohde representing the International Brotherhood of Electrical Workers, and Mr. Joseph W. Rao representing the Independent Electrical Contractors, Inc. Mr. Richard P. Owen, the Chairman of CMP 3, representing the International Association of Electrical Inspectors, was the chairman of the Task Group.

Panel Meeting Action: Reject
Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:

"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."

This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.
Number Eligible to Vote: 15
Ballot Results: Affirmative: 13 Abstain: 2
Comment on Affirmative:
OHDE: See my Affirmative Comment for Comment 16-34.
Explanation of Abstention:
DORNA: See my Explanation of Abstention for Comment 16-34.
KAHN: See my Explanation of Abstention on Comment 16-34.

16-551 Log #2803 NEC-P16 **Final Action: Reject**
(800.51, Table 800-50, 800-53 and Table 800-53)

Submitter: Richard P. Owen, City of St. Paul, Minnesota
Comment on Proposal No: 16-111
Recommendation: Continue to accept in principle.
Substantiation: The Panel 3/Panel 16 Task Group, appointed by the NEC TCC, developed this comment.

The task group agrees with Panel 16's action and statement.

The NEC TCC Task Group on Correlation Issues Between Panels 3 and 16 met three times via teleconference calls. The assignment by the TCC Chairman was to attempt to develop a resolution and accompanying comments for the different actions taken on proposals dealing with similar issues by CMP 3 and CMP 16 for their respective Articles in Chapters 7 and 8 of the NEC.

The Task Group studied the issues and determined that there were five major differences in the actions on proposals concerning Articles 725, 760, 770, 800, 820, and 830. The voting on these issues was not unanimous but did pass as at least a simple majority of the Task Group.

One of the major differences involved installing air duct cables in a fabricated air duct without enclosing the cable in a metal raceway.

The Task Group members who attended the teleconference call voted to accept text that permits "air duct cable" to be installed in fabricated ducts without enclosing in an additional metal raceway or metal cable. The text to be accepted by Panel 3 is recommended to be similar to that found in Proposals 3-194 for Article 725 and 3-288 for Article 760. The "air duct cable" will replace the plenum cable that was previously acceptable in fabricated duct without enclosing in a metal raceway or metal cable assembly.

The following members of Panels 3 and 16 participated in this Task Group assignment: From Panel 3, Mr. Sanford E. Egesdal representing the Automatic Fire Alarm Association, Inc., Mr. Ronald E. Maassen representing the National Electrical Contractors Association, and Mr. Mark C. Ode representing Underwriters Laboratories Inc. From Panel 16, Mr. Robert W. Jensen representing the Building Industry Consulting Services International, Mr. Harold C. Ohde representing the International Brotherhood of Electrical Workers, and Mr. Joseph W. Rao representing the Independent Electrical Contractors, Inc. Mr. Richard P. Owen, the Chairman of CMP 3, representing the International Association of Electrical Inspectors, was the chairman of the Task Group.

Panel Meeting Action: Reject
Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:

"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."

This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.
Number Eligible to Vote: 15
Ballot Results: Affirmative: 13 Abstain: 2
Comment on Affirmative:
OHDE: See my Affirmative Comment for Comment 16-34.
Explanation of Abstention:
DORNA: See my Explanation of Abstention for Comment 16-34.
KAHN: See my Explanation of Abstention on Comment 16-34.

16-552 Log #2450 NEC-P16 **Final Action: Accept**
(800.51, Table 800-50, 800-53, Table 800-53 and Figure 800-53)

Note: See the Technical Correlating Committee Note on Comment 16-452.
Submitter: William A. Wolfe, Steel Tube Institute of North America
Comment on Proposal No: 16-109
Recommendation: Reject this propsal.
Substantiation: See our companion proposal on 16-37.
Panel Meeting Action: Accept
Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:

"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."

This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.
Number Eligible to Vote: 15
Ballot Results: Affirmative: 13 Abstain: 2
Comment on Affirmative:
OHDE: See my Affirmative Comment for Comment 16-34.
Explanation of Abstention:
DORNA: See my Explanation of Abstention for Comment 16-34.
KAHN: See my Explanation of Abstention on Comment 16-34.

16-553 Log #2802 NEC-P16 **Final Action: Reject**
(800.51, Table 800-50, 800-53, Table 800-53 and Figure 800-53)

Submitter: Richard P. Owen, City of St. Paul, Minnesota
Comment on Proposal No: 16-109
Recommendation: Continue to accept in principle.
Substantiation: The Panel 3/Panel 16 Task Group, appointed by the NEC TCC, developed this comment.

The task group agrees with Panel 16's action and statement.

The NEC TCC Task Group on Correlation Issues Between Panels 3 and 16 met three times via teleconference calls. The assignment by the TCC Chairman was to attempt to develop a resolution and accompanying comments for the different actions taken on proposals dealing with similar issues by CMP 3 and CMP 16 for their respective Articles in Chapters 7 and 8 of the NEC.

The Task Group studied the issues and determined that there were five major differences in the actions on proposals concerning Articles 725, 760, 770, 800, 820, and 830. The voting on these issues was not unanimous but did pass as at least a simple majority of the Task Group.

One of the major differences involved installing air duct cables in a fabricated air duct without enclosing the cable in a metal raceway.

The Task Group members who attended the teleconference call voted to accept text that permits "air duct cable" to be installed in fabricated ducts without enclosing in an additional metal raceway or metal cable. The text to be accepted by Panel 3 is recommended to be similar to that found in Proposals 3-194 for Article 725 and 3-288 for Article 760. The "air duct cable" will replace the plenum cable that was previously acceptable in fabricated duct without enclosing in a metal raceway or metal cable assembly.

The following members of Panels 3 and 16 participated in this Task Group assignment: From Panel 3, Mr. Sanford E. Egesdal representing the Automatic Fire Alarm Association, Inc., Mr. Ronald E. Maassen representing the National Electrical Contractors Association, and Mr. Mark C. Ode representing Underwriters Laboratories Inc. From Panel 16, Mr. Robert W. Jensen representing the Building Industry Consulting Services International, Mr. Harold C. Ohde representing the International Brotherhood of Electrical Workers, and Mr. Joseph W. Rao representing the Independent Electrical Contractors, Inc. Mr. Richard P. Owen, the Chairman of CMP 3, representing the International Association of Electrical Inspectors, was the chairman of the Task Group.

Panel Meeting Action: Reject
Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:

"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."

This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.
Number Eligible to Vote: 15
Ballot Results: Affirmative: 13 Abstain: 2
Comment on Affirmative:
OHDE: See my Affirmative Comment for Comment 16-34.
Explanation of Abstention:
DORNA: See my Explanation of Abstention for Comment 16-34.
KAHN: See my Explanation of Abstention on Comment 16-34.

16-554 Log #2742 NEC-P16 **Final Action: Reject**
(800.51, Table 800.50, 800.53 and Table 800.53)

Submitter: Richard Fransen, Daikin America, Inc. / Rep. Cable Fire Research Association
Comment on Proposal No: 16-119
Recommendation: Continue to accept this proposal in principle.
Substantiation: See the comment from CFRA on proposal 16-112.
Panel Meeting Action: Reject
Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:

"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."

This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.
Number Eligible to Vote: 15
Ballot Results: Affirmative: 13 Abstain: 2
Comment on Affirmative:
OHDE: See my Affirmative Comment for Comment 16-34.
Explanation of Abstention:
DORNA: See my Explanation of Abstention for Comment 16-34.
KAHN: See my Explanation of Abstention on Comment 16-34.

16-555 Log #287 NEC-P16 **Final Action: Reject**
(800.51, Table 800.50, 800.53 & Table 800.53)

Submitter: Technical Committee on Air Conditioning
Comment on Proposal No: 16-110
Recommendation: Change the panel action on this proposal from reject to accept in principle.
Substantiation: NFPA 90A requires the listing of limited combustible cables. The listing requirements for air duct cables are essentially the listing requirements for limited combustible cables. The NEC needs to provide for the listing of these cables in order to correlate with NFPA 90A. The panel accepted the listing of air duct cables when it accepted proposal 16-112 in principle.

Why is the Technical Committee on Air Conditioning submitting comments?

In action 80-60, the Standards Council assigned primary jurisdiction for combustibles in plenums to the Technical Committee on Air Conditioning and directed it to seek the cooperation of the committees on Fire Tests, National Electrical Code and Safety to Life. The Technical Committee on Air Conditioning has been cooperating with the National Electrical Code Committee by submitting a series of proposals for the 2005 NEC. It now continues that cooperation by commenting on all proposals dealing with combustibles in plenums. The purpose of the proposals and comments is to bring about correlation between NFPA 70, National Electrical Code and NFPA 90A, Standard for the Installation of Air-Conditioning and Ventilating Systems. The Technical Committee on Air Conditioning established consensus on these comments through a letter ballot.

The NEC Technical Correlating Committee has acknowledged the responsibility of the Technical Committee on Air-Conditioning. The Technical Correlating Committee action on this proposal states:

"The Technical Correlating Committee understands that the Standards Council has given primary responsibility to the Technical Committee on Air-Conditioning for combustible materials in plenums in cooperation with other committees including the National Electrical Code Committee. The Chair of the Technical Correlating Committee will work with the Chair of the Technical Committee on Air-Conditioning and appoint a Task Group to review the proposals affecting correlation between Code-Making Panels 3, 16, and the Technical Committee on Air-Conditioning. In addition, the Technical Correlating Committee directs that this proposal be referred to the NFPA Committee on Air-Conditioning for comment."

NFPA 5000-2003 Building Construction and Safety Code, in Chapter 52, requires electrical systems and equipment to be designed and constructed in accordance with NFPA 70. Likewise, in Chapter 50, it requires air-conditioning and ventilating systems to be designed and constructed in accordance with NFPA 90A. NFPA 5000 has conflicting provisions for wiring in air handling spaces because of conflicts between NFPA 70 and NFPA 90A. Many of the proposals and comments from the Committee on Air-Conditioning to the National Electrical Code Committee are intended to eliminate these conflicts. These proposals and comments are part of the implementation of the Standards Council's recently issued Scope Coordination Policy for NFPA documents that has the "goal of having a coordinated set of documents for the built environment."

Panel Meeting Action: Reject
Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:

"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."

This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.
Number Eligible to Vote: 15
Ballot Results: Affirmative: 13 Abstain: 2
Comment on Affirmative:
OHDE: See my Affirmative Comment for Comment 16-34.
Explanation of Abstention:
DORNA: See my Explanation of Abstention for Comment 16-34.
KAHN: See my Explanation of Abstention on Comment 16-34.

16-556 Log #299 NEC-P16 **Final Action: Reject**
(800.51, Table 800.50, 800.53, Table 800.53)

Submitter: Technical Committee on Air Conditioning
Comment on Proposal No: 16-117
Recommendation: Continue to accept this proposal in principle.
Substantiation: See the comment from the Technical committee on Air Conditioning on proposal 16-112.
Panel Meeting Action: Reject
Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:
"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."
This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.
Number Eligible to Vote: 15
Ballot Results: Affirmative: 13 Abstain: 2
Comment on Affirmative:
OHDE: See my Affirmative Comment for Comment 16-34.
Explanation of Abstention:
DORNA: See my Explanation of Abstention for Comment 16-34.
KAHN: See my Explanation of Abstention on Comment 16-34.

16-557 Log #304 NEC-P16 **Final Action: Reject**
(800.51, Table 800.50, 800.53, Table 800.53)

Submitter: Technical Committee on Air Conditioning
Comment on Proposal No: 16-109
Recommendation: Continue to accept this proposal in principle.
Substantiation: See the comment from the Technical committee on Air Conditioning on proposal 16-112.
Panel Meeting Action: Reject
Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:
"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."
This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.
Number Eligible to Vote: 15
Ballot Results: Affirmative: 13 Abstain: 2
Comment on Affirmative:
OHDE: See my Affirmative Comment for Comment 16-34.
Explanation of Abstention:
DORNA: See my Explanation of Abstention for Comment 16-34.
KAHN: See my Explanation of Abstention on Comment 16-34.

16-558 Log #305 NEC-P16 **Final Action: Reject**
(800.51, Table 800.50, 800.53, Table 800.53)

Submitter: Technical Committee on Air Conditioning
Comment on Proposal No: 16-118
Recommendation: Continue to accept this proposal in principle.
Substantiation: See the comment from the Technical committee on Air Conditioning on proposal 16-112.
Panel Meeting Action: Reject
Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:
"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."
This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.
Number Eligible to Vote: 15
Ballot Results: Affirmative: 13 Abstain: 2
Comment on Affirmative:
OHDE: See my Affirmative Comment for Comment 16-34.
Explanation of Abstention:
DORNA: See my Explanation of Abstention for Comment 16-34.
KAHN: See my Explanation of Abstention on Comment 16-34.

16-559 Log #310 NEC-P16 **Final Action: Reject**
(800.51, Table 800.50, 800.53, Table 800.53)

Submitter: Technical Committee on Air Conditioning
Comment on Proposal No: 16-108
Recommendation: Continue to accept this proposal in principle.
Substantiation: See the comment from the Technical committee on Air Conditioning on proposal 16-112.
Panel Meeting Action: Reject
Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:
"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."
This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.
Number Eligible to Vote: 15
Ballot Results: Affirmative: 13 Abstain: 2
Comment on Affirmative:
OHDE: See my Affirmative Comment for Comment 16-34.
Explanation of Abstention:
DORNA: See my Explanation of Abstention for Comment 16-34.
KAHN: See my Explanation of Abstention on Comment 16-34.

16-560 Log #330 NEC-P16 **Final Action: Reject**
(800.51, Table 800.50, 800.53, Table 800.53)

Submitter: Technical Committee on Air Conditioning
Comment on Proposal No: 16-111
Recommendation: Continue to accept this proposal in principle.
Substantiation: See the comment from the Technical committee on Air Conditioning on proposal 16-112.
Panel Meeting Action: Reject
Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:
"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."
This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.
Number Eligible to Vote: 15
Ballot Results: Affirmative: 13 Abstain: 2
Comment on Affirmative:
OHDE: See my Affirmative Comment for Comment 16-34.
Explanation of Abstention:
DORNA: See my Explanation of Abstention for Comment 16-34.
KAHN: See my Explanation of Abstention on Comment 16-34.

16-561 Log #333 NEC-P16 **Final Action: Reject**
(800.51, Table 800.50, 800.53, Table 800.53)

Submitter: Technical Committee on Air Conditioning
Comment on Proposal No: 16-121
Recommendation: Continue to accept this proposal in principle.
Substantiation: See the comment from the Technical committee on Air Conditioning on proposal 16-112.
Panel Meeting Action: Reject
Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:
"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."
This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.
Number Eligible to Vote: 15
Ballot Results: Affirmative: 13 Abstain: 2
Comment on Affirmative:
OHDE: See my Affirmative Comment for Comment 16-34.
Explanation of Abstention:
DORNA: See my Explanation of Abstention for Comment 16-34.
KAHN: See my Explanation of Abstention on Comment 16-34.

16-562 Log #335 NEC-P16 **Final Action: Reject**
(800.51, Table 800.50, 800.53, Table 800.53)

Submitter: Technical Committee on Air Conditioning
Comment on Proposal No: 16-114
Recommendation: Continue to accept this proposal in principle.
Substantiation: See the comment from the Technical committee on Air Conditioning on proposal 16-112.
Panel Meeting Action: Reject
Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:
"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."
This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.
Number Eligible to Vote: 15
Ballot Results: Affirmative: 13 Abstain: 2
Comment on Affirmative:
OHDE: See my Affirmative Comment for Comment 16-34.
Explanation of Abstention:
DORNA: See my Explanation of Abstention for Comment 16-34.
KAHN: See my Explanation of Abstention on Comment 16-34.

16-563 Log #336 NEC-P16 **Final Action: Reject**
(800.51, Table 800.50, 800.53, Table 800.53)

Submitter: Technical Committee on Air Conditioning
Comment on Proposal No: 16-119
Recommendation: Continue to accept this proposal in principle.
Substantiation: See the comment from the Technical committee on Air Conditioning on proposal 16-112.
Panel Meeting Action: Reject
Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:
"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."
This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.
Number Eligible to Vote: 15
Ballot Results: Affirmative: 13 Abstain: 2
Comment on Affirmative:
OHDE: See my Affirmative Comment for Comment 16-34.
Explanation of Abstention:
DORNA: See my Explanation of Abstention for Comment 16-34.
KAHN: See my Explanation of Abstention on Comment 16-34.

16-564 Log #341 NEC-P16 **Final Action: Reject**
(800.51, Table 800.50, 800.53, Table 800.53)

Submitter: Technical Committee on Air Conditioning
Comment on Proposal No: 16-124
Recommendation: Continue to accept this proposal in principle.
Substantiation: See the comment from the Technical committee on Air Conditioning on proposal 16-112.
Panel Meeting Action: Reject
Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:
"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."
This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.
Number Eligible to Vote: 15
Ballot Results: Affirmative: 13 Abstain: 2
Comment on Affirmative:
OHDE: See my Affirmative Comment for Comment 16-34.
Explanation of Abstention:
DORNA: See my Explanation of Abstention for Comment 16-34.
KAHN: See my Explanation of Abstention on Comment 16-34.

16-565 Log #346 NEC-P16 **Final Action: Reject**
(800.51, Table 800.50, 800.53, Table 800.53)

Submitter: Technical Committee on Air Conditioning
Comment on Proposal No: 16-113
Recommendation: Continue to accept this proposal in principle.
Substantiation: See the comment from the Technical committee on Air Conditioning on proposal 16-112.
Panel Meeting Action: Reject
Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:
"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."
This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.
Number Eligible to Vote: 15
Ballot Results: Affirmative: 13 Abstain: 2
Comment on Affirmative:
OHDE: See my Affirmative Comment for Comment 16-34.
Explanation of Abstention:
DORNA: See my Explanation of Abstention for Comment 16-34.
KAHN: See my Explanation of Abstention on Comment 16-34.

16-566 Log #347 NEC-P16 **Final Action: Reject**
(800.51, Table 800.50, 800.53, Table 800.53)

Submitter: Technical Committee on Air Conditioning
Comment on Proposal No: 16-122
Recommendation: Continue to accept this proposal in principle.
Substantiation: See the comment from the Technical committee on Air Conditioning on proposal 16-112.
Panel Meeting Action: Reject
Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:

"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."

This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.
Number Eligible to Vote: 15
Ballot Results: Affirmative: 13 Abstain: 2
Comment on Affirmative:
OHDE: See my Affirmative Comment for Comment 16-34.
Explanation of Abstention:
DORNA: See my Explanation of Abstention for Comment 16-34.
KAHN: See my Explanation of Abstention on Comment 16-34.

16-567 Log #352 NEC-P16 **Final Action: Reject**
(800.51, Table 800.50, 800.53, Table 800.53)

Submitter: Technical Committee on Air Conditioning
Comment on Proposal No: 16-127
Recommendation: Continue to accept this proposal in principle.
Substantiation: See the comment from the Technical committee on Air Conditioning on proposal 16-112.
Panel Meeting Action: Reject
Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:

"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."

This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.
Number Eligible to Vote: 15
Ballot Results: Affirmative: 13 Abstain: 2
Comment on Affirmative:
OHDE: See my Affirmative Comment for Comment 16-34.
Explanation of Abstention:
DORNA: See my Explanation of Abstention for Comment 16-34.
KAHN: See my Explanation of Abstention on Comment 16-34.

16-568 Log #357 NEC-P16 **Final Action: Reject**
(800.51, Table 800.50, 800.53, Table 800.53)

Submitter: Technical Committee on Air Conditioning
Comment on Proposal No: 16-116
Recommendation: Continue to accept this proposal in principle.
Substantiation: See the comment from the Technical committee on Air Conditioning on proposal 16-112.
Panel Meeting Action: Reject
Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:

"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."

This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.
Number Eligible to Vote: 15
Ballot Results: Affirmative: 13 Abstain: 2
Comment on Affirmative:
OHDE: See my Affirmative Comment for Comment 16-34.
Explanation of Abstention:
DORNA: See my Explanation of Abstention for Comment 16-34.
KAHN: See my Explanation of Abstention on Comment 16-34.

16-569 Log #359 NEC-P16 **Final Action: Reject**
(800.51, Table 800.50, 800.53, Table 800.53)

Submitter: Technical Committee on Air Conditioning
Comment on Proposal No: 16-123
Recommendation: Continue to accept this proposal in principle.
Substantiation: See the comment from the Technical committee on Air Conditioning on proposal 16-112.
Panel Meeting Action: Reject
Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:

"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."

This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.
Number Eligible to Vote: 15
Ballot Results: Affirmative: 13 Abstain: 2
Comment on Affirmative:
OHDE: See my Affirmative Comment for Comment 16-34.
Explanation of Abstention:
DORNA: See my Explanation of Abstention for Comment 16-34.
KAHN: See my Explanation of Abstention on Comment 16-34.

16-570 Log #1798 NEC-P16 **Final Action: Reject**
(800.51Table 800.50, 800.53, Table 800.53)

Submitter: Richard P. Owen, City of St. Paul, Minnesota
Comment on Proposal No: 16-110
Recommendation: The panel action on this proposal should be changed to Accept in Principle.
Substantiation: The Panel 3/Panel 16 Task Group, appointed by the NEC TCC, developed this comment.

Panel 16 accepted the listing of duct cable in Proposal 16-112, which the submitter requested in proposal 16-110.

The NEC TCC Task Group on Correlation Issues Between Panels 3 and 16 met three times via teleconference calls. The assignment by the TCC Chairman was to attempt to develop a resolution and accompanying comments for the different actions taken on proposals dealing with similar issues by CMP 3 and CMP 16 for their respective Articles in Chapters 7 and 8 of the NEC.

The Task Group studied the issues and determined that there were five major differences in the actions on proposals concerning Articles 725, 760, 770, 800, 820, and 830. The voting on these issues was not unanimous but did pass as at least a simple majority of the Task Group.

One of the major differences involved creating a higher level of hierarchy for air duct cable. The Task Group members who were at the teleconference call recommended accepting "air duct cable" as a level "up" in the hierarchy sections and charts for all articles covered by Panels 3 and 16. The members felt that duct cable, based on all information submitted in proposals dealing with "air duct cable," had a lower burn rate and less products of combustion than plenum cable. It was also determined that building materials used for the actual air ducting would have the same fire and burn characteristics as the duct cable.

It was also felt that where air duct cable was used in a fabricated duct, the inclusion of this duct cable, as a higher level, would provide direction for installing this type of cable. The two different levels, air duct cable and plenum cable, would permit the NFPA 90A Committee to accept two different test techniques, one test for air duct cable and one for plenum cable.

The following members of Panels 3 and 16 participated in this Task Group assignment: From Panel 3, Mr. Sanford E. Egesdal representing the Automatic Fire Alarm Association, Inc., Mr. Ronald E. Maassen representing the National Electrical Contractors Association, and Mr. Mark C. Ode representing Underwriters Laboratories Inc. From Panel 16, Mr. Robert W. Jensen representing the Building Industry Consulting Services International, Mr. Harold C. Ohde representing the International Brotherhood of Electrical Workers, and Mr. Joseph W. Rao representing the Independent Electrical Contractors, Inc. Mr. Richard P. Owen, the Chairman of CMP 3, representing the International Association of Electrical Inspectors, was the chairman of the Task Group.

Panel Meeting Action: Reject

Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:

"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."

This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.

Number Eligible to Vote: 15

Ballot Results: Affirmative: 13 Abstain: 2

Comment on Affirmative:

OHDE: See my Affirmative Comment for Comment 16-34.

Explanation of Abstention:

DORNA: See my Explanation of Abstention for Comment 16-34.

KAHN: See my Explanation of Abstention on Comment 16-34.

16-571 Log #2726 NEC-P16 **Final Action: Reject**
(800.51, Table 800.50, 800.53, Table 800.53)

Submitter: Richard Fransen, Daikin America, Inc. / Rep. Cable Fire Research Association

Comment on Proposal No: 16-108

Recommendation: Continue to accept this proposal in principle.

Substantiation: See the comment from CFRA on proposal 16-112.

Panel Meeting Action: Reject

Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:

"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."

This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.

Number Eligible to Vote: 15

Ballot Results: Affirmative: 13 Abstain: 2

Comment on Affirmative:

OHDE: See my Affirmative Comment for Comment 16-34.

Explanation of Abstention:

DORNA: See my Explanation of Abstention for Comment 16-34.

KAHN: See my Explanation of Abstention on Comment 16-34.

16-572 Log #2728 NEC-P16 **Final Action: Reject**
(800.51, Table 800.50, 800.53, Table 800.53)

Submitter: Richard Fransen, Daikin America, Inc. / Rep. Cable Fire Research Association

Comment on Proposal No: 16-109

Recommendation: Continue to accept this proposal in principle.

Substantiation: See the comment from CFRA on proposal 16-112.

Panel Meeting Action: Reject

Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:

"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."

This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.

Number Eligible to Vote: 15

Ballot Results: Affirmative: 13 Abstain: 2

Comment on Affirmative:

OHDE: See my Affirmative Comment for Comment 16-34.

Explanation of Abstention:

DORNA: See my Explanation of Abstention for Comment 16-34.

KAHN: See my Explanation of Abstention on Comment 16-34.

16-573 Log #2730 NEC-P16 **Final Action: Reject**
(800.51, Table 800.50, 800.53, Table 800.53)

Submitter: Richard Fransen, Daikin America, Inc. / Rep. Cable Fire Research Association

Comment on Proposal No: 16-110

Recommendation: Change the panel action on this proposal from reject to accept in principle.

Substantiation: The panel accepted the listing of air duct cables when it accepted proposal 16-112 in principal.

Panel Meeting Action: Reject

Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:

"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."

This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.

Number Eligible to Vote: 15

Ballot Results: Affirmative: 13 Abstain: 2

Comment on Affirmative:

OHDE: See my Affirmative Comment for Comment 16-34.

Explanation of Abstention:

DORNA: See my Explanation of Abstention for Comment 16-34.

KAHN: See my Explanation of Abstention on Comment 16-34.

16-574 Log #2731 NEC-P16 **Final Action: Reject**
(800.51, Table 800.50, 800.53, Table 800.53)

Submitter: Richard Fransen, Daikin America, Inc. / Rep. Cable Fire Research Association

Comment on Proposal No: 16-111

Recommendation: Continue to accept this proposal in principle.

Substantiation: See the comment from CFRA on proposal 16-112.

Panel Meeting Action: Reject

Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:

"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."

This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.

Number Eligible to Vote: 15

Ballot Results: Affirmative: 13 Abstain: 2

Comment on Affirmative:

OHDE: See my Affirmative Comment for Comment 16-34.

Explanation of Abstention:

DORNA: See my Explanation of Abstention for Comment 16-34.

KAHN: See my Explanation of Abstention on Comment 16-34.

16-575 Log #2734 NEC-P16 **Final Action: Reject**
(800.51, Table 800.50, 800.53, Table 800.53)

Submitter: Richard Fransen, Daikin America, Inc. / Rep. Cable Fire Research Association
Comment on Proposal No: 16-113
Recommendation: Continue to accept this proposal in principle.
Substantiation: See the comment from CFRA on proposal 16-112.
Panel Meeting Action: Reject
Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:
"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."
This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.
Number Eligible to Vote: 15
Ballot Results: Affirmative: 13 Abstain: 2
Comment on Affirmative:
OHDE: See my Affirmative Comment for Comment 16-34.
Explanation of Abstention:
DORNA: See my Explanation of Abstention for Comment 16-34.
KAHN: See my Explanation of Abstention on Comment 16-34.

16-576 Log #2736 NEC-P16 **Final Action: Reject**
(800.51, Table 800.50, 800.53, Table 800.53)

Submitter: Richard Fransen, Daikin America, Inc. / Rep. Cable Fire Research Association
Comment on Proposal No: 16-114
Recommendation: Continue to accept this proposal in principle.
Substantiation: See the comment from CFRA on proposal 16-112.
Panel Meeting Action: Reject
Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:
"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."
This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.
Number Eligible to Vote: 15
Ballot Results: Affirmative: 13 Abstain: 2
Comment on Affirmative:
OHDE: See my Affirmative Comment for Comment 16-34.
Explanation of Abstention:
DORNA: See my Explanation of Abstention for Comment 16-34.
KAHN: See my Explanation of Abstention on Comment 16-34.

16-577 Log #2739 NEC-P16 **Final Action: Reject**
(800.51, Table 800.50, 800.53 Table 800.53)

Submitter: Richard Fransen, Daikin America, Inc. / Rep. Cable Fire Research Association
Comment on Proposal No: 16-116
Recommendation: Continue to accept this proposal in principle.
Substantiation: See the comment frm CFRA on proposal 16-112.
Panel Meeting Action: Reject
Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:
"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."
This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.
Number Eligible to Vote: 15
Ballot Results: Affirmative: 13 Abstain: 2
Comment on Affirmative:
OHDE: See my Affirmative Comment for Comment 16-34.
Explanation of Abstention:
DORNA: See my Explanation of Abstention for Comment 16-34.
KAHN: See my Explanation of Abstention on Comment 16-34.

16-578 Log #2740 NEC-P16 **Final Action: Accept in Principle**
(800.51, Table 800.50, 800.53, Table 800.53)

Submitter: Richard Fransen, Daikin America, Inc. / Rep. Cable Fire Research Association
Comment on Proposal No: 16-17
Recommendation: Continue to accept this proposal in principle.
Substantiation: See the comment from the CFRA proposal 16-112.
Panel Meeting Action: Accept in Principle
Panel Statement: See CMP 16 action on Comment 16-67.
Number Eligible to Vote: 15
Ballot Results: Affirmative: 15

16-579 Log #2741 NEC-P16 **Final Action: Reject**
(800.51, Table 800.50, 800.53, Table 800.53)

Submitter: Richard Fransen, Daikin America, Inc. / Rep. Cable Fire Research Association
Comment on Proposal No: 16-118
Recommendation: Continue to accept this proposal in principle.
Substantiation: See the comment from CFRA on proposal 16-112.
Panel Meeting Action: Reject
Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:
"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."
This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.
Number Eligible to Vote: 15
Ballot Results: Affirmative: 13 Abstain: 2
Comment on Affirmative:
OHDE: See my Affirmative Comment for Comment 16-34.
Explanation of Abstention:
DORNA: See my Explanation of Abstention for Comment 16-34.
KAHN: See my Explanation of Abstention on Comment 16-34.

16-580 Log #2743 NEC-P16 **Final Action: Reject**
(800.51, Table 800.50 800.53, Table 800.53)

Submitter: Richard Fransen, Daikin America, Inc. / Rep. Cable Fire Research Association
Comment on Proposal No: 16-121
Recommendation: Continue to accept this proposal in principle.
Substantiation: See the comment from CFRA on proposal 16-112.
Panel Meeting Action: Reject
Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:
"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."
This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.

Number Eligible to Vote: 15
Ballot Results: Affirmative: 13 Abstain: 2
Comment on Affirmative:
OHDE: See my Affirmative Comment for Comment 16-34.
Explanation of Abstention:
DORNA: See my Explanation of Abstention for Comment 16-34.
KAHN: See my Explanation of Abstention on Comment 16-34.

16-581 Log #2744 NEC-P16 **Final Action: Reject**
(800.51, Table 800.50, 800.53, Table 800.53)

Submitter: Richard Fransen, Daikin America, Inc. / Rep. Cable Fire Research Association
Comment on Proposal No: 16-122
Recommendation: Continue to accept this proposal in principle.
Substantiation: See the comment from CFRA on proposal 16-112.
Panel Meeting Action: Reject
Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:
"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."
This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comment.
Number Eligible to Vote: 15
Ballot Results: Affirmative: 13 Abstain: 2
Comment on Affirmative:
OHDE: See my Affirmative Comment for Comment 16-34.
Explanation of Abstention:
DORNA: See my Explanation of Abstention for Comment 16-34.
KAHN: See my Explanation of Abstention on Comment 16-34.

16-582 Log #2745 NEC-P16 **Final Action: Reject**
(800.51, Table 800.50, 800.53, Table 800.53)

Submitter: Richard Fransen, Daikin America, Inc. / Rep. Cable Fire Research Association
Comment on Proposal No: 16-123
Recommendation: Continue to accept this proposal in principle.
Substantiation: See the comment from CFRA on proposal 16-112.
Panel Meeting Action: Reject
Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:
"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."
This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.
Number Eligible to Vote: 15
Ballot Results: Affirmative: 13 Abstain: 2
Comment on Affirmative:
OHDE: See my Affirmative Comment for Comment 16-34.
Explanation of Abstention:
DORNA: See my Explanation of Abstention for Comment 16-34.
KAHN: See my Explanation of Abstention on Comment 16-34.

16-583 Log #2746 NEC-P16 **Final Action: Reject**
(800.51, Table 800.50, 800.53, Table 800.53)

Submitter: Richard Fransen, Daikin America, Inc. / Rep. Cable Fire Research Association
Comment on Proposal No: 16-124
Recommendation: Continue to accept this proposal in principle.
Substantiation: See the comment from CFRA on proposal 16-112.
Panel Meeting Action: Reject
Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:
"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."
This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.
Number Eligible to Vote: 15
Ballot Results: Affirmative: 13 Abstain: 2
Comment on Affirmative:
OHDE: See my Affirmative Comment for Comment 16-34.
Explanation of Abstention:
DORNA: See my Explanation of Abstention for Comment 16-34.
KAHN: See my Explanation of Abstention on Comment 16-34.

16-584 Log #2749 NEC-P16 **Final Action: Reject**
(800.51, Table 800.50, 800.53, Table 800.53)

Submitter: Richard Fransen, Daikin America, Inc. / Rep. Cable Fire Research Association
Comment on Proposal No: 16-127
Recommendation: Continue to accept this proposal in principle.
Substantiation: See the comment from CFRA on proposal 16-112.
Panel Meeting Action: Reject
Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:
"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."
This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.
Number Eligible to Vote: 15
Ballot Results: Affirmative: 13 Abstain: 2
Comment on Affirmative:
OHDE: See my Affirmative Comment for Comment 16-34.
Explanation of Abstention:
DORNA: See my Explanation of Abstention for Comment 16-34.
KAHN: See my Explanation of Abstention on Comment 16-34.

16-585 Log #2518ppp NEC-P16 **Final Action: Accept**
(800.51, Table 800.50, 800.53, Table 800.53)

Note: See the Technical Correlating Committee Note on Comment 16-452.
Submitter: Vince Baclawski, National Electrical Manufacturers Association (NEMA)
Comment on Proposal No: 16-108
Recommendation: Reject this proposal.
Substantiation: See our companion comment on Proposal 1-69.
Panel Meeting Action: Accept
Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:
"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."
This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.
Number Eligible to Vote: 15
Ballot Results: Affirmative: 13 Abstain: 2
Comment on Affirmative:
OHDE: See my Affirmative Comment for Comment 16-34.
Explanation of Abstention:
DORNA: See my Explanation of Abstention for Comment 16-34.
KAHN: See my Explanation of Abstention on Comment 16-34.

16-586 Log #2518qqq NEC-P16 **Final Action: Accept**
(800.51, Table 800.50, 800.53, Table 800.53)

Note: See the Technical Correlating Committee Note on Comment 16-452.
Submitter: Vince Baclawski, National Electrical Manufacturers Association (NEMA)
Comment on Proposal No: 16-111
Recommendation: Reject this proposal.
Substantiation: See our companion comment on Proposal 1-69.
Panel Meeting Action: Accept
Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:
"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."
This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.
Number Eligible to Vote: 15
Ballot Results: Affirmative: 13 Abstain: 2
Comment on Affirmative:
OHDE: See my Affirmative Comment for Comment 16-34.
Explanation of Abstention:
DORNA: See my Explanation of Abstention for Comment 16-34.
KAHN: See my Explanation of Abstention on Comment 16-34.

16-587 Log #2518hh NEC-P16 **Final Action: Accept**
(800.51, Table 800.50, 800.53, Table 800.53, Figure 800.53)

Note: See the Technical Correlating Committee Note on Comment 16-452.
Submitter: Vince Baclawski, National Electrical Manufacturers Association (NEMA)
Comment on Proposal No: 16-109
Recommendation: Reject this proposal.
Substantiation: See our companion comment on Proposal 1-69.
Panel Meeting Action: Accept
Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:
"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."
This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.
Number Eligible to Vote: 15
Ballot Results: Affirmative: 13 Abstain: 2
Comment on Affirmative:
OHDE: See my Affirmative Comment for Comment 16-34.
Explanation of Abstention:
DORNA: See my Explanation of Abstention for Comment 16-34.
KAHN: See my Explanation of Abstention on Comment 16-34.

16-588 Log #1489 NEC-P16 **Final Action: Accept**
(800.51(A))

Note: See the Technical Correlating Committee Note on Comment 16-452.
Submitter: Marcelo M. Hirschler, GBH International / Rep. Fire Retardant Chemicals
Comment on Proposal No: 16-46
Recommendation: Continue rejecting this proposal.
Substantiation: • This comment recommends rejection of a subdivision of "other spaces used for environmental air" and continued rejection of granting priority to NFPA 90A on choices of wiring methods.
• The input from CMP 3 and from the NEC Technical Coordinating Committee makes it clear that the terminology used in 300.22 has served the NEC well and needs no change. It has also become clear now that the expertise needed for choosing the type of wiring systems permitted in any space should be the prerogative of the NEC, which (through its various panels and its Technical Correlating Committee) has greater expertise and a broader view than the Technical Committee on Air Conditioning (responsible for NFPA 90A). Therefore, the NEC panels should continue making their own choices regarding wiring methods.
• It has already been shown in detail by the fire hazard and fire risk analysis presented together with my original proposals (see for example the section on pages 2080-2091 of the NEC-ROP of the substantiation for my proposal 3-130) that there is no need to change the requirements, or limit the application, for wiring methods in plenums, because the fire safety record is excellent.
• I understand that this comment represents a change in some of the concepts the submitter believed when the proposal was submitted, but "even old dogs can learn".
Panel Meeting Action: Accept
Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:
"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."
This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.
Number Eligible to Vote: 15
Ballot Results: Affirmative: 13 Abstain: 2
Comment on Affirmative:
OHDE: See my Affirmative Comment for Comment 16-34.
Explanation of Abstention:
DORNA: See my Explanation of Abstention for Comment 16-34.
KAHN: See my Explanation of Abstention on Comment 16-34.

16-589 Log #2822 NEC-P16 **Final Action: Accept in Principle**
(800.51(A), 820(A), 830-5(A), FPN No. 2)

Submitter: Richard P. Owen, City of St. Paul, Minnesota
Comment on Proposal No: 16-128
Recommendation: Continue to accept.
Substantiation: The Panel 3/Panel 16 Task Group, appointed by the NEC TCC, developed this comment.
The task group agrees with Panel 16's action and statement.
The following members of Panels 3 and 16 participated in this Task Group assignment: From Panel 3, Mr. Sanford E. Egesdal representing the Automatic Fire Alarm Association, Inc., Mr. Ronald E. Maassen representing the National Electrical Contractors Association, and Mr. Mark C. Ode representing Underwriters Laboratories Inc. From Panel 16, Mr. Robert W. Jensen representing the Building Industry Consulting Services International, Mr. Harold C. Ohde representing the International Brotherhood of Electrical Workers, and Mr. Joseph W. Rao representing the Independent Electrical Contractors, Inc. Mr. Richard P. Owen, the Chairman of CMP 3, representing the International Association of Electrical Inspectors, was the chairman of the Task Group.
Panel Meeting Action: Accept in Principle
Panel Statement: The fine print notes accepted in the panel actions on Comments 16-242, 16-594, 16-830, and 16-891 are an editorial improvement over the existing fine print notes.
Number Eligible to Vote: 15
Ballot Results: Affirmative: 14 Negative: 1
Explanation of Negative:
JONES: The substantiation provided in the associated Proposal 16-128 used NFPA 90A as part of the reason for the suggested change. The Standards Council made a decision that is identified as Number 03-10-25 plus subsequent letter by the Standards Council Chairman, Phillip DiNenno to Mr. Loren Caudill, dated December 3, 2003, which stated, in pertinent part as follows:
"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."

16-590 Log #3143 NEC-P16 **Final Action: Reject**
(800.51(A), 820.51(A) and 830.5(A)(2), FPN No. 2)

Submitter: Michael I. Callanan, IBEW
Comment on Proposal No: 16-128
Recommendation: This proposal should be rejected and the proposed 2005 text should be deleted. Retain the current 2002 FPN for related code sections.

Substantiation: An effort to better correlate the requirements in the NFPA 70 standard with the NFPA 90A will require teamwork and representation from both committees. There is no such definition – adequate fire resistant and low smoke producing characteristics located in the 2002 NFPA 90A, Standard for Installation of Air-Conditioning and Ventilating Systems. It is a requirement not a definition. The new proposed FPN language – For a definition of adequate fire-resistant and low smoke producing characteristics is not in the form of a true FPN which is used as a suggestion but its language spells more of a requirement. This FPN is in violation of the nature of a FPN and also the NEC style Manual 3.1.3 which states FPNs contain explanatory information. They shall not contain requirements and shall not be written in mandatory language. This proposal does not add to the clarity and consistency of the National Electrical Code.

If a change to the National Electrical Code is needed in the way electrical installations are installed and completed, the technical nuts and bolts issues will have to be worked out and a plan has to be developed that will take into account what effect the change or changes will have on both the NFPA 90A standard as well as the NFPA 70, National Electrical Code. This will allow both standards to become stronger, more stronger and more effective to everyone involved. This will also eliminate conflicting standards between the two and harmonize all that are involved.

This comment represents the official position of the International Brotherhood of Electrical Workers Codes and Standards Committee.

Panel Meeting Action: Reject

Panel Statement: CMP 16 rejects the comment and clarified the FPNs. Refer to action on Comments 16-594, 16-830, and 16-891.

Number Eligible to Vote: 15

Ballot Results: Affirmative: 13 Negative: 1 Abstain: 1

Explanation of Negative:

JONES: The substantiation provided in the associated Proposal 16-128 used NFPA 90A as part of the reason for the suggested change. The Standards Council made a decision that is identified as Number 03-10-25 plus subsequent letter by the Standards Council Chairman, Phillip DiNenno to Mr. Loren Caudill, dated December 3, 2003, which stated, in pertinent part as follows:

"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."

Explanation of Abstention:

DORNA: See my Explanation of Abstention for Comment 16-34.

16-591 Log #3735 NEC-P16 **Final Action: Reject**
(800.51(A) FPN, 820-51(A) FPN and 830-5(A)(2) FPN No. 2)

Submitter: Marcelo M. Hirschler, GBH International / Rep. Fire Retartdant Chemicals Association

Comment on Proposal No: 16-128

Recommendation: Reject this proposal and also the corresponding Fine Print Note in 770.51 (A).

Substantiation: This comment recommends a rejection of the concept in the proposal to reference NFPA 90A, which would mean that requirements for these cables could change without the knowledge and assent of NEC CMP members.

It has become clear now that the expertise needed for choosing the type of wiring systems permitted in any space should be the prerogative of the NEC, which (through its various panels and its Technical Correlating Committee) has greater expertise and a broader view than the Technical Committee on Air Conditioning (responsible for NFPA 90A). Therefore, the NEC panels should continue making their own choices regarding wiring methods. The issue of correlation (or even reference) to either NFPA 90A or the categories of plenums used in NFPA 90A should continue to be rejected by CMP 3. As stated by Mr. Harold Ohde in his negative on CMP 16 action on proposal 16-9: "Other codes should not be deciding on the typed of wiring methods to be used in these spaces. The electrical experts are capable of doing this and it is covered quite well in 300.22. The more we let those outside of the NEC make these decisions the more we weaken adoption of the NEC. In addition, we could make the change and there is nothing that requires a jurisdiction to even adopt 90A."

This comment is one of a series of comments on Articles 300, 725, 760, 770, 800, 820 and 830, regarding "plenum cables". The philosophy behind all the comments is that the NEC is OK as published in 2002, but that 2 minor changes might represent improvements: (i) the clarification of the 6 inch extension of a wiring method into a more restricted environment and (ii) the clarification in the Fine Print Notes that a cable listed to NFPA 262 is listed both based on its "low-smoke" characteristics and its "low-flame-spread" characteristics, and that the two are not listed separately. I understand that this comment represents a change in some of the concepts the submitter believed when the proposal was submitted, but "even old dogs can learn".

Panel Meeting Action: Reject

Panel Statement: CMP 16 rejects the recommendation.

See panel action on Comment 16-594 from the same submitter that recommended opposite action. The panel accepted Comment 16-594.

See panel action on Comments 16-242, 16-830, and 16-891.

Number Eligible to Vote: 15

Ballot Results: Affirmative: 14 Negative: 1

Explanation of Negative:

JONES: The substantiation provided in the associated Proposal 16-128 used NFPA 90A as part of the reason for the suggested change. The Standards Council made a decision that is identified as Number 03-10-25 plus subsequent letter by the Standards Council Chairman, Phillip DiNenno to Mr. Loren Caudill, dated December 3, 2003, which stated, in pertinent part as follows:

"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."

16-592 Log #227 NEC-P16 **Final Action: Accept in Principle**
(800.51(A), FPN)

Submitter: Technical Committee on Air Conditioning

Comment on Proposal No: 16-129

Recommendation: Continue to accept this proposal in principle.

Substantiation: See the comment from the Technical Committee on Air Conditioning on proposal 16-47.

Panel Meeting Action: Accept in Principle

Panel Statement: The FPN accepted in the panel action on Comment 16-594 is an editorial improvement over the existing fine print notes.

Number Eligible to Vote: 15

Ballot Results: Affirmative: 14 Negative: 1

Explanation of Negative:

JONES: The substantiation provided in the associated Proposal 16-129 used NFPA 90A as part of the reason for the suggested change. The Standards Council made a decision that is identified as Number 03-10-25 plus subsequent letter by the Standards Council Chairman, Phillip DiNenno to Mr. Loren Caudill, dated December 3, 2003, which stated, in pertinent part as follows:

"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."

16-593 Log #2812 NEC-P16 **Final Action: Accept in Principle**
(800.51(A), FPN)

Submitter: Richard P. Owen, City of St. Paul, Minnesota

Comment on Proposal No: 16-129

Recommendation: Continue to accept in principle.

Substantiation: The Panel 3/Panel 16 Task Group, appointed by the NEC TCC, developed this comment.

The task group agrees with Panel 16's action and statement.

The NEC TCC Task Group on Correlation Issues Between Panels 3 and 16 met three times via teleconference calls. The assignment by the TCC Chairman was to attempt to develop a resolution and accompanying comments for the different actions taken on proposals dealing with similar issues by CMP 3 and CMP 16 for their respective Articles in Chapters 7 and 8 of the NEC.

The Task Group studied the issues and determined that there were five major differences in the actions on proposals concerning Articles 725, 760, 770, 800, 820, and 830. The voting on these issues was not unanimous but did pass as at least a simple majority of the Task Group.

One of the major differences involved installing air duct cables in a fabricated air duct without enclosing the cable in a metal raceway.

The Task Group members who attended the teleconference call voted to accept text that permits "air duct cable" to be installed in fabricated ducts without enclosing in an additional metal raceway or metal cable. The text to be accepted by Panel 3 is recommended to be similar to that found in Proposals 3-194 for Article 725 and 3-288 for Article 760. The "air duct cable" will replace the plenum cable that was previously acceptable in fabricated duct without enclosing in a metal raceway or metal cable assembly.

The following members of Panels 3 and 16 participated in this Task Group assignment: From Panel 3, Mr. Sanford E. Egesdal representing the Automatic Fire Alarm Association, Inc., Mr. Ronald E. Maassen representing the National Electrical Contractors Association, and Mr. Mark C. Ode representing Underwriters Laboratories Inc. From Panel 16, Mr. Robert W. Jensen representing the Building Industry Consulting Services International,

Mr. Harold C. Ohde representing the International Brotherhood of Electrical Workers, and Mr. Joseph W. Rao representing the Independent Electrical Contractors, Inc. Mr. Richard P. Owen, the Chairman of CMP 3, representing the International Association of Electrical Inspectors, was the chairman of the Task Group.

Panel Meeting Action: Accept in Principle

Panel Statement: The fine print note accepted in the panel action on Comment 16-594 is an editorial improvement over the existing fine print notes.

Number Eligible to Vote: 15

Ballot Results: Affirmative: 14 Negative: 1

Explanation of Negative:

JONES: The substantiation provided in the associated Proposal 16-129 used NFPA 90A as part of the reason for the suggested change. The Standards Council made a decision that is identified as Number 03-10-25 plus subsequent letter by the Standards Council Chairman, Phillip DiNenno to Mr. Loren Caudill, dated December 3, 2003, which stated, in pertinent part as follows:

"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."

16-594 Log #3727 NEC-P16 **Final Action: Accept**
(800.51(A), FPN)

Note: See the Technical Correlating Committee Note on Comment 16-452.

Submitter: Marcelo M. Hirschler, GBH International / Rep. Fire Retardant Chemicals Association

Comment on Proposal No: 16-129

Recommendation: 800.51 Listing Requirements for Communications Wires and Cables and Communications Raceways.

Communications wires and cables shall have a voltage rating of not less than 300 volts and shall be listed in accordance with 800.51(A) through (J), and communications raceways shall be listed in accordance with 800.51(K) through (L). Conductors in communications cables, other than in a coaxial cable, shall be copper.

FPN: See 800.4 for listing requirement for equipment.

(A) Type CMP. Type CMP communications plenum cable shall be listed as being suitable for use in ducts, plenums, and other spaces used for environmental air and shall also be listed as having adequate fire resistant and low smoke producing characteristics.

FPN: One method of defining a cable that is low smoke producing cable and fire-resistant cable is that the cable exhibits a maximum peak optical density of 0.5 or less, an average optical density of 0.15 or less, and a maximum flame spread distance of 1.52 m (5 ft) or less when tested in accordance with NFPA 262, Standard Method of Test for Flame Travel and Smoke of Wires and Cables for Use in Air Handling Spaces. ~~by establishing an acceptable value of the smoke produced when tested in accordance with NFPA 262-1999, Standard Method of Test for Flame Travel and Smoke of Wires and Cables for Use in Air Handling Spaces, to a maximum peak optical density of 0.5 and a maximum average optical density of 0.15. Similarly, one method of defining fire resistant cables is by establishing a maximum allowable flame travel distance of 1.52 m (5 ft) when tested in accordance with the same test.~~

No change for 800.51 (B) through 800.51 (L)

Substantiation: This comment recommends a slight change in wording for the existing Fine Print Note, by recognizing that listing of plenum cable by NFPA 262 represents listing to both low smoke and low flame spread, and that cables cannot be listed separately to either property. This is basically an editorial change, as a clarification, to the existing Fine Print Note.

This comment also recommends a rejection of the initial concept in the proposal to reference NFPA 90A, which would mean that requirements for these cables could change without the knowledge and assent of NEC CMP members.

It has become clear now that the expertise needed for choosing the type of wiring systems permitted in any space should be the prerogative of the NEC, which (through its various panels and its Technical Correlating Committee) has greater expertise and a broader view than the Technical Committee on Air Conditioning (responsible for NFPA 90A). Therefore, the NEC panels should continue making their own choices regarding wiring methods. The issue of correlation (or even reference) to either NFPA 90A or the categories of plenums used in NFPA 90A should continue to be rejected by CMP 3. As stated by Mr. Harold Ohde in his negative on CMP 16 action on proposal 16-9: "Other codes should not be deciding on the typed of wiring methods to be used in these spaces. The electrical experts are capable of doing this and it is covered quite well in 300.22. The more we let those outside of the NEC make these decisions the more we weaken adoption of the NEC. In addition, we could make the change and there is nothing that requires a jurisdiction to even adopt 90A."

This comment is one of a series of comments on Articles 300, 725, 760, 770, 800, 820 and 830, regarding "plenum cables". The philosophy behind all the comments is that the NEC is OK as published in 2002, but that 2 minor changes might represent improvements: (i) the clarification of the 6 inch extension of a wiring method into a more restricted environment and (ii) the clarification in the Fine Print Notes that a cable listed to NFPA 262 is listed both based on its "low-smoke" characteristics and its "low-flame-spread" characteristics, and that the two are not listed separately.

I understand that this comment represents a change in some of the concepts the submitter believed when the proposal was submitted, but "even old dogs can learn".

See attached comments from the chairman of the Technical Correlating Committee.

Panel Meeting Action: Accept

Number Eligible to Vote: 15

Ballot Results: Affirmative: 14 Negative: 1

Explanation of Negative:

JONES: The substantiation provided in the associated Proposal 16-129 used NFPA 90A as part of the reason for the suggested change. The Standards Council made a decision that is identified as Number 03-10-25 plus subsequent letter by the Standards Council Chairman, Phillip DiNenno to Mr. Loren Caudill, dated December 3, 2003, which stated, in pertinent part as follows:

"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."

16-595 Log #825 NEC-P16 **Final Action: Accept**
(800.51(H))

Submitter: Technical Correlating Committee on National Electrical Code®

Comment on Proposal No: 16-130

Recommendation: The Technical Correlating Committee directs that the Panel clarify the Panel Action on this Proposal.

Examples located in the Panel Action text do not comply with the NEC Style Manual and should be placed in FPNs.

This action will be considered by the Panel as a Public Comment.

Substantiation: This is a direction from the National Electrical Code Technical Correlating Committee in accordance with 3-4.2 and 3-4.3 of the Regulations Governing Committee Projects.

Panel Meeting Action: Accept

End the last sentence of 800.51(H) as follows: "...classification using the suffix "CI"." This action removes "(for example, CMP-CI, CMR-CI, CMG-CI, CM-CI, and CMX-CI)."

Panel Statement: CMP 16 accepts the direction of the TCC to review Proposal 16-130.

CMP 16 deleted the examples, since they are not necessary.

Number Eligible to Vote: 15

Ballot Results: Affirmative: 15

16-596 Log #1359 NEC-P16 **Final Action: Reject**
(800.51(H))

Submitter: Barry F. O'Connell, Tyco Thermal Controls

Comment on Proposal No: 16-130

Recommendation: "(H) Communications Circuit Integrity (CI) Cable. Cables suitable for use in communications systems to ensure survivability of critical circuits during a specified time under fire conditions shall be listed as circuit integrity (CI) cable or listed as part of an Electrical Circuit Protective System. Cables identified in 800.51(A), (B), (C), (D), and (E) that meet the requirements for circuit integrity shall have the additional classification using the suffix "CI" (for example, CMP-CI, CMR-CI, CM-CI, and CMX-CI). (FPN unchanged)

Substantiation: The definition as proposed is narrow, because it ignores the other "Electrical Circuit Protective Systems", the listed fire-resistant electrical cable systems.

"Circuit Integrity" was introduced in Article 760 in the 1999 code, and given a common sense definition that referred to a cable's capability "to ensure continued operation of critical circuits during a specified time under fire conditions". In a FPN, it references UL2196 as the required fire-test - the same benchmark that applies to Electrical Circuit Protective Systems.

The additional words suggested are consistent with the definition in the Panel Action on Proposal 3-255, as follows:

"Fire Alarm Circuit Integrity (CI) Cable. Cables suitable for use in fire alarm systems to ensure survivability of critical circuits during a specified time under fire conditions shall be listed as circuit integrity (CI) cable or listed as part of an Electrical Circuit Protective System".

Panel Meeting Action: Reject
Panel Statement: The addition of the phrase "or listed as part of an Electrical Circuit Protective System" adds confusion, in that an individually listed CI cable and a listed Electrical Circuit Protective System are very different.
Number Eligible to Vote: 15
Ballot Results: Affirmative: 15

16-597 Log #3714 NEC-P16 **Final Action: Accept**
(800.51(J), FPN (New))

Submitter: Marcelo M. Hirschler, GBH International / Rep. Fire Retardant Chemicals Association
Comment on Proposal No: 16-48
Recommendation: Continue accepting this proposal in principle but use the following language for the new FPN.

800.51 Listing Requirements for Communications Wires and Cables and Communications Raceways.
Communications wires and cables shall have a voltage rating of not less than 300 volts and shall be listed in accordance with 800.51(A) through (J), and communications raceways shall be listed in accordance with 800.51(K) through (L). Conductors in communications cables, other than in a coaxial cable, shall be copper.

FPN: See 800.4 for listing requirement for equipment.

(J) Plenum Communications Raceways. Plenum communications raceways listed as plenum optical fiber raceways shall be permitted for use in ducts, plenums, and other spaces used for environmental air and shall also be listed as having adequate fire resistant and low smoke producing characteristics.

FPN: One method of defining that an optical fiber raceway is a low smoke producing raceway and a fire-resistant raceway is that the raceway exhibits a maximum peak optical density of 0.5 or less, an average optical density of 0.15 or less, and a maximum flame spread distance of 1.52 m (5 ft) or less when tested in accordance with the plenum test in UL 2024, Standard for Optical Fiber Cable Raceway.

(K) Riser Communications Raceway. Riser communications raceways shall be listed as having adequate fire resistant characteristics capable of preventing the carrying of fire from floor to floor.

FPN: One method of defining fire-resistant characteristics capable of preventing the carrying of fire from floor to floor is that the raceways pass the requirements of the test for Flame Propagation (riser) in UL 2024, Standard for Optical Fiber Cable Raceway.

(L) General Purpose Communications Raceway. General purpose communications raceways shall be listed as being resistant to the spread of fire.

FPN: One method of defining resistance to the spread of fire is that the raceways pass the requirements of the Vertical-Tray Flame test (General use) in UL 2024, Standard for Optical Fiber Cable raceway.

No change for 800.51 (A) through 800.51 (I)
Substantiation: Note: State the problem that will be resolved by your recommendation. Give the specific reason for your comment including copies of tests, research papers, fire experience, etc. If more than 200 words, it may be abstracted for publication.

This comment recommends a slight change in wording from the proposed Fine Print Note, by recognizing that listing of plenum optical fiber raceways by UL 2024 represents listing to both low smoke and low flame spread, and that raceways cannot be listed separately to either property. This is basically an editorial change, as a clarification, to the new Fine Print Note.

The new added Fine Print Notes for riser and cable tray raceways are for consistency. The proposed wording also has consistency between the FPN for plenum, riser and cable tray raceways. The added Fine Print Notes for riser and cable tray raceways use the language of CMP 16 in Proposal 16-175.

This comment also recommends a rejection of the concept in proposal 16-49 to reference NFPA 90A, which would mean that requirements for these raceways could change without the knowledge and assent of NEC CMP members.

It has become clear now that the expertise needed for choosing the type of wiring systems permitted in any space should be the prerogative of the NEC, which (through its various panels and its Technical Correlating Committee) has greater expertise and a broader view than the Technical Committee on Air Conditioning (responsible for NFPA 90A). Therefore, the NEC panels should continue making their own choices regarding wiring methods. The issue of correlation (or even reference) to either NFPA 90A or the categories of plenums used in NFPA 90A should continue to be rejected by CMP 3. As stated by Mr. Harold Ohde in his negative on CMP 16 action on proposal 16-9: "Other codes should not be deciding on the typed of wiring methods to be used in these spaces. The electrical experts are capable of doing this and it is covered quite well in 300.22. The more we let those outside of the NEC make these decisions the more we weaken adoption of the NEC. In addition, we could make the change and there is nothing that requires a jurisdiction to even adopt 90A."

See attached comments from the chairman of the Technical Correlating Committee.
Panel Meeting Action: Accept
Number Eligible to Vote: 15
Ballot Results: Affirmative: 15

16-598 Log #3718 NEC-P16 **Final Action: Accept in Principle**
(800.51(J), FPN (New))

Submitter: Marcelo M. Hirschler, GBH International / Rep. Fire Retardant Chemicals Association
Comment on Proposal No: 16-49
Recommendation: Accept this proposal in principle in part but use the following language for the new FPN.

800.51 Listing Requirements for Communications Wires and Cables and Communications Raceways.
Communications wires and cables shall have a voltage rating of not less than 300 volts and shall be listed in accordance with 800.51(A) through (J), and communications raceways shall be listed in accordance with 800.51(K) through (L). Conductors in communications cables, other than in a coaxial cable, shall be copper.

FPN: See 800.4 for listing requirement for equipment.

(J) Plenum Communications Raceways. Plenum communications raceways listed as plenum optical fiber raceways shall be permitted for use in ducts, plenums, and other spaces used for environmental air and shall also be listed as having adequate fire resistant and low smoke producing characteristics.

FPN: One method of defining that an optical fiber raceway is a low smoke producing raceway and a fire-resistant raceway is that the raceway exhibits a maximum peak optical density of 0.5 or less, an average optical density of 0.15 or less, and a maximum flame spread distance of 1.52 m (5 ft) or less when tested in accordance with the plenum test in UL 2024, Standard for Optical Fiber Cable Raceway.

(K) Riser Communications Raceway. Riser communications raceways shall be listed as having adequate fire resistant characteristics capable of preventing the carrying of fire from floor to floor.

FPN: One method of defining fire-resistant characteristics capable of preventing the carrying of fire from floor to floor is that the raceways pass the requirements of the test for Flame Propagation (riser) in UL 2024, Standard for Optical Fiber Cable Raceway.

(L) General Purpose Communications Raceway. General purpose communications raceways shall be listed as being resistant to the spread of fire.

FPN: One method of defining resistance to the spread of fire is that the raceways pass the requirements of the Vertical-Tray Flame test (General use) in UL 2024, Standard for Optical Fiber Cable raceway.

No change for 800.51 (A) through 800.51 (I)
Substantiation: This comment recommends a significant change in wording from the proposed Fine Print Note, by recognizing that listing of plenum optical fiber raceways by UL 2024 represents listing to both low smoke and low flame spread, and that raceways cannot be listed separately to either property. This is basically an editorial change, as a clarification, to the new Fine Print Note.

The new added Fine Print Notes for riser and cable tray raceways are for consistency. The proposed wording also has consistency between the FPN for plenum, riser and cable tray raceways. The added Fine Print Notes for riser and cable tray raceways use the language of CMP 16 in Proposal 16-175.

This comment also recommends a rejection of the concept in this proposal to reference NFPA 90A, which would mean that requirements for these raceways could change without the knowledge and assent of NEC CMP members.

It has become clear now that the expertise needed for choosing the type of wiring systems permitted in any space should be the prerogative of the NEC, which (through its various panels and its Technical Correlating Committee) has greater expertise and a broader view than the Technical Committee on Air Conditioning (responsible for NFPA 90A). Therefore, the NEC panels should continue making their own choices regarding wiring methods. The issue of correlation (or even reference) to either NFPA 90A or the categories of plenums used in NFPA 90A should continue to be rejected by CMP 3. As stated by Mr. Harold Ohde in his negative on CMP 16 action on proposal 16-9: "Other codes should not be deciding on the typed of wiring methods to be used in these spaces. The electrical experts are capable of doing this and it is covered quite well in 300.22. The more we let those outside of the NEC make these decisions the more we weaken adoption of the NEC. In addition, we could make the change and there is nothing that requires a jurisdiction to even adopt 90A."

See attached comments from the chairman of the Technical Correlating Committee.
Panel Meeting Action: Accept in Principle
Panel Statement: See panel action on Comment 16-597.
Number Eligible to Vote: 15
Ballot Results: Affirmative: 15

16-599 Log #276 NEC-P16 **Final Action: Accept**
(800.52)

Submitter: Technical Committee on Air Conditioning
Comment on Proposal No: 16-132
Recommendation: Continue to reject this proposal.

Substantiation: The Technical Committee on Air Conditioning agrees with the panel reject statement.

This comment is one in a series of comments including 16-12, 16-40, 16-60, 16-83, 16-115, 16-132, 16-138, 16-156, 16-180, 16-188, 16-195, 16-207, 16-209, 16-211, 16-228, 16-229, and 16-234.

Panel Meeting Action: Accept

Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:

"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."

This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.

Number Eligible to Vote: 15

Ballot Results: Affirmative: 13 Abstain: 2

Comment on Affirmative:

OHDE: See my Affirmative Comment for Comment 16-34.

Explanation of Abstention:

DORNA: See my Explanation of Abstention for Comment 16-34.

KAHN: See my Explanation of Abstention on Comment 16-34.

16-600 Log #2750 NEC-P16 **Final Action: Accept**
(800.52)

Submitter: Richard Fransen, Daikin America, Inc. / Rep. Cable Fire Research Association

Comment on Proposal No: 16-132

Recommendation: Continue to reject this proposal.

Substantiation: CFRA agrees with the panel reject statement.

Panel Meeting Action: Accept

Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:

"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."

This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.

Number Eligible to Vote: 15

Ballot Results: Affirmative: 13 Abstain: 2

Comment on Affirmative:

OHDE: See my Affirmative Comment for Comment 16-34.

Explanation of Abstention:

DORNA: See my Explanation of Abstention for Comment 16-34.

KAHN: See my Explanation of Abstention on Comment 16-34.

16-601 Log #3144 NEC-P16 **Final Action: Accept**
(800.52)

Submitter: Michael I. Callanan, IBEW

Comment on Proposal No: 16-132

Recommendation: Continue to reject.

Substantiation: I agree with the panel action to reject proposal 16-132. No technical substantiation has been provided that a change to the 2002 NEC language is needed or required. This comment represents the official position of the International Brotherhood of Electrical Workers Codes and Standards Committee.

Panel Meeting Action: Accept

Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:

"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."

This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.

Number Eligible to Vote: 15

Ballot Results: Affirmative: 13 Abstain: 2

Comment on Affirmative:

OHDE: See my Affirmative Comment for Comment 16-34.

Explanation of Abstention:

DORNA: See my Explanation of Abstention for Comment 16-34.

KAHN: See my Explanation of Abstention on Comment 16-34.

16-602 Log #3713 NEC-P16 **Final Action: Accept**
(800.52)

Submitter: Marcelo M. Hirschler, GBH International / Rep. Fire Retardant Chemicals Association

Comment on Proposal No: 16-132

Recommendation: Continue rejecting this proposal and make no changes in the terminology of plenum spaces or of "other spaces used for environmental air".

Substantiation: The terminology in NEC 2002 is correct and needs no change. See also the substantiation for my comments on proposal 16-59.

Panel Meeting Action: Accept

Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:

"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."

This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.

Number Eligible to Vote: 15

Ballot Results: Affirmative: 13 Abstain: 2

Comment on Affirmative:

OHDE: See my Affirmative Comment for Comment 16-34.

Explanation of Abstention:

DORNA: See my Explanation of Abstention for Comment 16-34.

KAHN: See my Explanation of Abstention on Comment 16-34.

16-603 Log #3872 NEC-P16 **Final Action: Reject**
(800.52(B))

Submitter: Marcelo M. Hirschler, GBH International / Rep. Fire Retardant Chemicals Association

Comment on Proposal No: 16-13

Recommendation: *There is no consistency in the NEC on the removal of abandoned cables. This is primarily an issue with cables in Articles 645, 725, 760, 770, 800, 820 and 830. The wording should be as follows consistently: "Abandoned [cable type] cables shall be removed." It should also be contained in the section on applications of cables.*

800.52 Installation of Communications Wires, Cables, and Equipment. Communications wires and cables from the protector to the equipment or, where no protector is required, communications wires and cables attached to the outside or inside of the building shall comply with 800.52(A) through (E).

(B) Spread of Fire or Products of Combustion. Installations in hollow spaces, vertical shafts, and ventilation or air-handling ducts shall be made so that the possible spread of fire or products of combustion is not substantially increased. Openings around penetrations through fire resistance-rated walls, partitions, floors, or ceilings shall be firestopped using approved methods to maintain the fire resistance rating. Abandoned ~~The accessible portion of abandoned~~ communications cables shall be removed.

FPN: Directories of electrical construction materials published by qualified testing laboratories contain many listing installation restrictions necessary to maintain the fire-resistive rating of assemblies where penetrations or openings are made.

Substantiation: The issue here is the interpretation of the action required with respect to what is accessible. The issue of "accessible" cables creates confusion that makes the enforcement of the removal of abandoned cable "dicey" because it is unclear what "accessible" means. The NEC defines the following terms in Article 100:

Accessible (as applied to equipment). Admitting close approach; not guarded by locked doors, elevation, or other effective means.

Accessible (as applied to wiring methods). Capable of being removed or exposed without damaging the building structure or finish or not permanently closed in by the structure or finish of the building.

Accessible, Readily (Readily Accessible). Capable of being reached quickly for operation, renewal, or inspections without requiring those to whom ready access is requisite to climb over or remove obstacles or to resort to portable ladders, and so forth.

The phrase "the accessible portion of abandoned cables" is much vaguer than the definitions in the code, because the term "accessible portion" is not defined. Therefore, accessible portion is probably considered that length of cable that is within a few feet of the opening, and that can be cut off by reaching in. That is clearly not the intent of the code provision: the entire length of cable that can be pulled out should be removed.

Another possible interpretation is that this refers to excluding from removal those cables installed in the areas that CMP 16 calls "inaccessible ceiling cavity plenums and inaccessible raised floor plenums". The concept of those "inaccessible areas" was rejected by CMP 3 as inappropriate because there is no known fire safety problem with the present type of wiring methods, but it was approved by CMP 16. If this concept is approved, and the wording of "abandoned cables" includes the "accessible portion" concept, it would clearly mean that the NEC would permit some cables to be left permanently in place once abandoned. This was soundly rejected by the membership several times, in a concept upheld by Standards Council.

It is pretty obvious that the concept of removal of abandoned cable is not one where someone should try to tear down a building or cause structural damage to it just to remove cables "permanently closed in by the structure or finish of the building". I believe that we must trust in the intelligence of our code officials and electrical inspectors that they will not demand such actions. If there is a feeling that this is a possibility (which I cannot believe), it might be worth adding a Fine Print Note to the effect that removal of abandoned cables should not cause structural damage to the building. An example follows:

FPN: Removal of abandoned cables is not intended to cause structural damage to buildings.

Clearly, "the accessible portion of abandoned cables" is a misleading phrase which can lead to abundant misinterpretation. It should be eliminated in favor of the simpler "abandoned cables".

Panel Meeting Action: Reject

Panel Statement: See CMP 16 action and statement on Comment 16-310.

Number Eligible to Vote: 15

Ballot Results: Affirmative: 14 Negative: 1

Explanation of Negative:

OHDE: I am voting negative on both the panel action and the panel statment. I agree with submitter's substantiation and the real issue here is the interpretation of the term "accessible" versus the phrase "The accessible portion of abandoned cable". The term "accessible portion" is vague and is not defined and should be as this wording can have many different interpretations. This would be very difficult to enforce because of the unclear meaning of this term. Article 100 does define the term "accessible" and these definitions are quite clear and concise in regards to their meaning and applications. The panel statement for comment 16-310 state that definition of "Accessible (as applied to wiring methods)" in Article 100 applies. This definition does not have the same meaning or interpretation for the phrase "accessible portion". "The accessible portion of abandoned (type) cables shall not be permitted to remain" can be found in the proposed 2005 NEC in 770.3, 800.3, 820.3 and 830.3. The 2002 requirement in 800.52(b) has been moved to a new section 800.3.

16-604 Log #1458 NEC-P16 **Final Action: Reject**
(800.52(E) (New))

Submitter: Technical Correlating Committee on Signaling Systems for the Protection of Life and Property

Comment on Proposal No: 16-136

Recommendation: Accept in principle by retaining the accepted text and adding the following:

(E) Audio System Circuits and PLFA Circuits. Audio system circuits described in Section 640.9(C) and installed using Class 2 or Class 3 wiring methods in compliance with Sections 725.54 and 725.61 shall not be permitted to be installed in the same cable or raceway with communications cables.

Substantiation: See Panel 3 action on proposals 3-162a and 3-264a. Since communications cables are permitted to substitute for Class 2, Class 3, and power-limited fire alarm cables, the same installation requirements should apply.

Panel Meeting Action: Reject

Panel Statement: The submitter has not provided adequate substantiation.

Section 640.9(C) establishes compatibility between the power supply/ amplifier and cabling methods.

640.9(C) presently provides the requirements:

"Audio amplifier output circuits wired using Class 1 wiring methods shall be considered equivalent to Class 1 circuits and be installed in accordance with 725.25, where applicable.

Audio amplifier output circuits wired using Class 2 or Class 3 wiring methods shall be considered equivalent to Class 2 or Class 3 circuits respectively. They shall use conductors insulated at not less than the requirements of 725.71, and shall be installed in accordance with 725.54 and 725.61."

Number Eligible to Vote: 15

Ballot Results: Affirmative: 15

16-605 Log #740 NEC-P16 **Final Action: Reject**
(800.52(F))

Submitter: John Pryma, Genesis Cable Systems

Comment on Proposal No: 16-135

Recommendation: Revise to read as follows:

800.52(F) Dwelling Unit Communications Outlets - For New Construction. Cabled communications outlets shall be installed in every kitchen, family room, home office, master bedroom and any other area where there is a current or future requirement for data networking, Internet access, emergency communications, remote medical diagnostics, surveillance video, entertainment video, home automation controls, access controls, energy management, video conferencing, voice and typed communications, and all other intelligent customer premises terminals that require connection to a duplex power outlet and a communications outlet to perform their intended purpose.

Substantiation: As technology evolves at a very rapid pace, more and more intelligent devices are being connected to a duplex power outlet. The majority of these also need a communications outlet in close proximity so that they can communicate with other local and remote devices. Improper connections to these devices in the residence greatly increases the risk of electrocution when power tools are used to install these cables after the fact through wall cavities containing power cables and the path that these installations set up can be used by power and lighting surges to enter the house.

A structured cabling system installed during the home building process will prevent future dangers of electrocution, tripping during a fire and the potential of having residents meeting the ADA qualifications, suffering in their own homes due to the difficulty of communicating with the outside world for emergency and diagnostic medical reasons without having readily available communications outlets.

Panel Meeting Action: Reject

Panel Statement: This comment expands the original proposal to cover every room in the dwelling unit and, as stated in the last sentence of the submitter's substantiation, is intended to require the pre-wiring of all dwelling units. No substantiating data for the perceived tripping hazard have been provided to justify such a far-reaching revision to the NEC communications requirements. Further, if accepted, this change would require that existing installations be updated when communications wiring changes are made within the dwelling unit (see the last two sentences of 80.9(C)).

Number Eligible to Vote: 15

Ballot Results: Affirmative: 15

Comment on Affirmative:

BRUNSSEN: This comment should continue to be rejected. Comment 16-605 will require all new dwellings to be pre-wired for telephone, imposing additional and unnecessary cost upon the consumer. In today's telecommunications world, many homeowners utilize convenient 'cordless' phones, thus greatly reducing the need for additional telecommunications wiring and telecommunications 'extension cords'. Cellular (wireless) phones are rapidly becoming the primary access to the telecommunications network for many consumers, further reducing the need for additional telecommunications wiring and extension cords. The introduction of new 'Wi Fi' (wireless) technology to provide for personal computers will further reduce the need for additional telecom wiring and cords. The submitter has provided no substantiation for the perceived hazards to justify the imposition of this additional requirement.

GUBISCH: These comments are in support of the Panel Actions to Reject Proposal 16-135. The proposal would require the installation of cabled communication outlets in every kitchen, family room, living room, office, master bedroom or similar area of newly constructed living units.

The proposal is unacceptable for two reasons:

1. The submitters have not provided sufficient substantiation of the perceived hazards to justify such a costly requirement. The number of annual housing starts in the United States during the past several years has been approximately 1.2 million for single-family units, and 1.6 million for two or more dwelling units. At an estimated added cost to the dwelling purchaser of only $500, the burden of this requirement on consumers would be over one billion dollars annually. No comparable injury or property loss has been demonstrated.

2. The proposal is based on obsolescent technology. Residential communication systems are increasingly relying on RF technologies such as those used in portable and cellular telephones, wireless LANs and wireless audio speaker systems. As the available alternatives to wired communication systems increase, it becomes less and less justifiable to burden the consumer with unwanted wiring infrastructure.

JOHNSON: This comment would require all new dwellings to be pre-wired for communications and would impose unnecessary cost upon the consumer. In today's market, there are already solutions for communications connections that do not involve running wires. Consumers are presently using wireless telephones to cover the entire house. Wireless phone jacks are available to extend communications into unwired rooms. Various versions of IEEE 802.11 are presently in use to provide wireless connectivity between computers throughout the house. Cellular telephones have proliferated to the point that some customers use this as their primary telephone and do not subscribe to a traditional wired service. Approving this comment and/or associated proposal would require consumers to fund the installation of a wired network in their homes when another medium may be more suitable to their situation Tripping hazards can be solved through wireless approaches or through proper post-wiring procedures. The consumer should be free to use the medium of his choice (wireless, conventional twisted pair, CAT5 wiring, coaxial, power-line signaling, wireless, etc) rather than bear the burden of a pre-wiring that may not best fit his needs.

16-606 Log #1820 NEC-P16 **Final Action: Reject**
(800.52(F) (New))

Submitter: Thomas P. Hammerberg, Automatic Fire Alarm Association
Comment on Proposal No: 16-136
Recommendation: Accept in principle by retaining the accepted text and adding the following:

(E) Audio System Circuits and PLFA Circuits. Audio system circuits described in section 640.9(C) and installed using Class 2 or Class 3 wiring methods in compliance with Sections 725.54 and 725.61 shall not be permitted to be installed in the same cable or raceway with communications cables.

Substantiation: See Panel 3 action on Proposals 3-162a and 3-264a. Since communications cables are permitted to substitute for Class 2, Class 3, and power-limited fire alarm cables, the same installation requirements should apply.
Panel Meeting Action: Reject
Panel Statement: The submitter has not provided adequate substantiation. Section 640.9(C) establishes compatibility between the power supply/amplifier and cabling methods. 640.9(C) presently provides the requirements:
"Audio amplifier output circuits wired using Class 1 wiring methods shall be considered equivalent to Class 1 circuits and be installed in accordance with 725.25, where applicable.
Audio amplifier output circuits wired using Class 2 or Class 3 wiring methods shall be considered equivalent to Class 2 or Class 3 circuits respectively. They shall use conductors insulated at not less than the requirements of 725.71, and shall be installed in accordance with 725.54 and 725.61."
Number Eligible to Vote: 15
Ballot Results: Affirmative: 15
Comment on Affirmative:
JOHNSON: For a number of years, "structured wiring" consisting of fiber optics, communications, audio, and coaxial cables within the same jacket have been manufactured and safely installed in residential dwellings. Approving the submitter's comment would disallow the continued use of this cable without appropriate substantiation.

16-607 Log #2145 NEC-P16 **Final Action: Reject**
(800.52(F))

Submitter: Robert W. Jensen, dbi-Telecommunications
Comment on Proposal No: 16-135
Recommendation: Revise text to read as follows:

800.52(F) Dwelling Unit Communications Outlets. For new construction, cabled communications outlets shall be installed in every kitchen, family room, living room, office, bedroom, or similar room or area of dwelling units.
FPN: One way to determine accepted industry practice is to refer to nationallly recognized standards such as ANSI/EIA/TIA 570-B-2003, Residential Telecommunications Infrastructure Standard, or other ANSI-approved installation standards.

Substantiation: The revised text relaxes requirements of the original proposal by limiting the number of rooms to be wired and that only new home construction would be involved. In addition to the original substantiation to reduce tripping hazards to occupants, the following substantiation needs to be considered.

1. Reduces the safety risk of electrocution to technicians where extended length drill bits (54 to 72 inches) are typically used to install cables and penetrate unseen electrical cables in the attic, wall and ceiling space. (See pictures provided with this comment).
2. Reduces the tripping hazard for fire protection personnel during a fire.
3. Reduces the need for home re-wiring for communications which typically involves tracing, handling, and snaking through electrical cable pathways and spaces such as in attics and wall cavities which creates potentially greater hazard such as electrocution.
4. Increases the use of home protection systems and automation which typically includes fire detection and direct dial-up remote monitoring systems.
5. This proposal ties directly to one of the 5 key NFPA strategies to reduce fatal home fires (See the report I have provided entitled: "Fire Loss in the United States During 2002." Michael J Karter, Jr., Fire Analysis and Research Division, NFPA).
6. Places communications outlets in homes to address fire safety needs of young high user communications groups, older adults, and ADA affected.
7. A fine print note is used as a reference to a standard that specifies installation requirements such as minimum separation from power cabling and minimum requirements for cabling in support of the FCC mandate for category 3 cable or better. In addition to, this standard references several NEC Articles for meeting minimum requirements.

Note: Supporting material is available for review at NFPA Headquarters.
Panel Meeting Action: Reject
Panel Statement: The submitter has not provided sufficient substantiation for the perceived hazards for the addition of such a requirement.
Number Eligible to Vote: 15
Ballot Results: Affirmative: 13 Negative: 2
Explanation of Negative:
JENSEN: CMP 16 did not address any of the substantiation within the comment. OHDE: I am voting negative on both the panel action and the panel statement on this comment. I believe that submitter has indeed provided enough and sufficient substantiation in regards for the hazards to occupants that warrants the acceptance of this comment.
Comment on Affirmative:
BRUNSSEN: This comment should continue to be rejected. Comment 16-607 will require all new dwellings to be pre-wired for telephone, imposing additional and unnecessary cost upon the consumer. In today's telecommunications world, many homeowners utilize convenient 'cordless' phones, thus greatly reducing the need for additional telecommunications wiring and telecommunications 'extension cords'. Cellular (wireless) phones are rapidly becoming the primary access to the telecommunications network for many consumers, further reducing the need for additional telecommunications wiring and extension cords. The introduction of new 'Wi Fi' (wireless) technology to provide for personal computers will further reduce the need for additional telecom wiring and cords. The submitter has provided no substantiation for the perceived hazards to justify the imposition of this additional requirement.
GUBISCH: See my Explanation of Affirmative Vote on Comment 16-605.
JOHNSON: This comment would require all new dwellings to be pre-wired for communications and would impose unnecessary cost upon the consumer. In today's market, there are already solutions for communications connections that do not involve running wires. Consumers are presently using wireless telephones to cover the entire house. Wireless phone jacks are available to extend communications into unwired rooms. Various versions of IEEE 802.11 are presently in use to provide wireless connectivity between computers throughout the house. Cellular telephones have proliferated to the point that some customers use this as their primary telephone and do not subscribe to a traditional wired service. Approving this comment and/or associated proposal would require consumers to fund the installation of a wired network in their homes when another medium may be more suitable to their situation Tripping hazards can be solved through wireless approaches or through proper post-wiring procedures. The consumer should be free to use the medium of his choice (wireless, conventional twisted pair, CAT5 wiring, coaxial, power-line signaling, wireless, etc) rather than bear the burden of a pre-wiring that may not best fit his needs.

16-608 Log #255 NEC-P16 **Final Action: Accept**
(800.53)

Submitter: Technical Committee on Air Conditioning
Comment on Proposal No: 16-138
Recommendation: Continue to reject this proposal.
Substantiation: The Technical Committee on Air Conditioning agrees with the panel reject statement.

This comment is one in a series of comments including 16-12, 16-40, 16-60, 16-83, 16-115, 16-132, 16-138, 16-156, 16-180, 16-188, 16-195, 16-207, 16-209, 16-211, 16-228, 16-229 and 16-234.
Panel Meeting Action: Accept
Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:

"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision

cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."

This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.

Number Eligible to Vote: 15
Ballot Results: Affirmative: 13 Abstain: 2
Comment on Affirmative:
OHDE: See my Affirmative Comment for Comment 16-34.
Explanation of Abstention:
DORNA: See my Explanation of Abstention for Comment 16-34.
KAHN: See my Explanation of Abstention on Comment 16-34.

16-609 Log #1471 NEC-P16 **Final Action: Accept**
(800.53)

Submitter: Marcelo M. Hirschler, GBH International / Rep. Fire Retardant Chemicals
Comment on Proposal No: 16-59
Recommendation: Continue rejecting this proposal.
Substantiation: • This comment recommends continued rejection of a subdivision of "plenums" or "other spaces used for environmental air" and continued rejection of granting priority to NFPA 90A on choices of wiring methods.

• The input from CMP 3 and from the NEC Technical Coordinating Committee makes it clear that the terminology used in 300.22 has served the NEC well and needs no change. It has also become clear now that the expertise needed for choosing the type of wiring systems permitted in any space should be the prerogative of the NEC, which (through its various panels and its Technical Correlating Committee) has greater expertise and a broader view than the Technical Committee on Air Conditioning (responsible for NFPA 90A). Therefore, the NEC panels should continue making their own choices regarding wiring methods.

• It has already been shown in detail by the fire hazard and fire risk analysis presented together with my original proposals (see for example the section on pages 2080-2091 of the NECROP of the substantiation for my proposal 3-130) that there is no need to change the requirements, or limit the application, for wiring methods in plenums, because the fire safety record is excellent.

• I understand that this comment represents a change in some of the concepts the submitter believed when the proposal was submitted, but "even old dogs can learn".

Panel Meeting Action: Accept
Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:

"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."

This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.

Number Eligible to Vote: 15
Ballot Results: Affirmative: 13 Abstain: 2
Comment on Affirmative:
OHDE: See my Affirmative Comment for Comment 16-34.
Explanation of Abstention:
DORNA: See my Explanation of Abstention for Comment 16-34.
KAHN: See my Explanation of Abstention on Comment 16-34.

16-610 Log #1772 NEC-P16 **Final Action: Accept**
(800.53)

Submitter: Richard P. Owen, City of St. Paul, Minnesota
Comment on Proposal No: 16-138
Recommendation: Continue to reject.
Substantiation: The Panel 3/Panel 16 Task Group, appointed by the NEC TCC, developed this comment.

The task group agrees with Panel 16's action and statement.

By accepting the majority of the suggested changes in a submitted comment for Proposal 3-94, "Other Spaces for Environmental Air" has been further subdivided into two separate spaces, ceiling cavity and raised floor plenums but the Panel still has maintained the electrical industry terminology associated with these spaces. Providing this further subdivision will enhance the usability of the NEC by making it easier to determine what other spaces are being referenced in this section. It will also improve correlation between the NEC and NFPA 90A.

The following members of Panels 3 and 16 participated in this Task Group assignment: From Panel 3, Mr. Sanford E. Egesdal representing the Automatic Fire Alarm Association, Inc., Mr. Ronald E. Maassen representing the National Electrical Contractors Association, and Mr. Mark C. Ode representing Underwriters Laboratories Inc. From Panel 16, Mr. Robert W. Jensen representing the Building Industry Consulting Services International, Mr. Harold C. Ode representing the International Brotherhood of Electrical Workers, and Mr. Joseph W. Rae representing the Independent Electrical Contractors, Inc. Mr. Richard P. Wen, the Chairman of CMP 3, representing the International Association of Electrical Inspectors, was the chairman of the Task Group.

Panel Meeting Action: Accept
Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:

"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."

This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.

Number Eligible to Vote: 15
Ballot Results: Affirmative: 13 Abstain: 2
Comment on Affirmative:
OHDE: See my Affirmative Comment for Comment 16-34.
Explanation of Abstention:
DORNA: See my Explanation of Abstention for Comment 16-34.
KAHN: See my Explanation of Abstention on Comment 16-34.

16-611 Log #2270 NEC-P16 **Final Action: Accept**
(800.53)

Note: See the Technical Correlating Committee Note on Comment 16-452.
Submitter: Frank Bisbee, Communication Planning Corporation
Comment on Proposal No: 16-139
Recommendation: Reject this proposal.
Substantiation: In recognizing the use of "duct cable" or "limited combustible cable," the proposal fails to consider toxicity of the newly specified product and the relative incapacitation factor presented by the chemical constituents of the polymer in new cable design. A recent study by the NFPA Fire Protection Research Foundation has advanced an international effort to make certain that people can escape a burning building before being incapacitated (overcome by smoke or gases generated by thermal decomposition). The work is part of a revolution in fire safety in which codes and standards are beginning to address how much smoke, or gases generated by thermal decomposition, will incapacitate people, rather than how much will kill them.

The jacketing and insulating materials used in duct cable and limited combustible cable are subject to heat decomposition and the emission of sub-lethal toxic fumes. Some of these fumes can incapacitate (blinding and choking) the building occupants. The requirements for using "duct cable" have failed to recognize toxicity or emissions that are essentially colorless (i.e. hydrogen fluoride, which converts to hydrofluoric acid upon contact with any moisture, and other toxic gases may be generated).

In 2002, the ISO (International Organization for Standardization), a network of the industrial-standards institutes of 147 countries, put forth a new standard calling for attention to the "sub-lethal" effects of smoke - when the heat, the thickness of smoke, and the toxic gases in smoke will block vision, make a person choke or tear up, or render a person unconscious. Because of this new ISO standard, these effects of smoke are supposed to be taken into account when regulating the size and placement of exits and the types of materials allowed in buildings. But to meet the standard, one needs to know more about the smoke produced by burning various materials. Working with the National Institute of Standards and Technology, the FPRF is laying the scientific groundwork needed to put the new standard into practice. The foundation recently completed the project's second phase of its International study of the Sub-lethal Effects of Fire Smoke on Survivability and Health. In the most recent phase of the study, the foundation's researchers performed three tests: They burned a sofa made of upholstered cushions on a steel frame, some particle board bookcases, and some household cable. In each case, the materials were burned in a room with a long adjacent corridor. The researchers measured the toxic gases emitted by each item, and how quickly the gases filled the room and moved down the corridor. They determined when and where in the room and in the hallway people would have to stop because of the smoke or the heat. Fire-test laboratories and manufacturers are expected to use this data to develop smaller-scale tests that can be done

in a laboratory, so they won't need to set a room on fire every time they test a product. FPRF is uniquely equipped to conduct such studies, and NFPA officials expect more lives to be saved because of the new fire-safety standards that will emerge from this work.

By allowing and specifying the use of "duct cable," this proposal supports the use of materials counter to the findings already available in the public domain regarding sub-lethal toxicity of hydrogen fluoride and through the NFPA Fire Protection Research Foundation regarding incapacitation factors. Polymers used in duct cable and other limited combustible cable materials far exceed the incapacitation factor of other materials used in various cable construction both in generation of sub-lethal constituents and in hypertoxicity.

Panel Meeting Action: Accept

Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:

"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."

This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.

Number Eligible to Vote: 15

Ballot Results: Affirmative: 13 Abstain: 2

Comment on Affirmative:

OHDE: See my Affirmative Comment for Comment 16-34.

Explanation of Abstention:

DORNA: See my Explanation of Abstention for Comment 16-34.

KAHN: See my Explanation of Abstention on Comment 16-34.

16-612 Log #2751 NEC-P16 **Final Action: Accept**
(800.53)

Submitter: Richard Fransen, Daikin America, Inc. / Rep. Cable Fire Research Association

Comment on Proposal No: 16-138

Recommendation: Continue to reject this proposal.

Substantiation: CFRA agrees with the panel action.

Panel Meeting Action: Accept

Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:

"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."

This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.

Number Eligible to Vote: 15

Ballot Results: Affirmative: 13 Abstain: 2

Comment on Affirmative:

OHDE: See my Affirmative Comment for Comment 16-34.

Explanation of Abstention:

DORNA: See my Explanation of Abstention for Comment 16-34.

KAHN: See my Explanation of Abstention on Comment 16-34.

16-613 Log #3093 NEC-P16 **Final Action: Reject**
(800.53)

Submitter: Loren M. Caudill, DuPont Electronic & Comunication Technologies

Comment on Proposal No: 16-112

Recommendation: Continue to accept this proposal in principle.

Substantiation: This allows correlation with other NFPA standards such as NFPA 90A, NFPA 13 and NFPA 5000.

Panel Meeting Action: Reject

Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:

"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."

This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.

Number Eligible to Vote: 15

Ballot Results: Affirmative: 13 Abstain: 2

Comment on Affirmative:

OHDE: See my Affirmative Comment for Comment 16-34.

Explanation of Abstention:

DORNA: See my Explanation of Abstention for Comment 16-34.

KAHN: See my Explanation of Abstention on Comment 16-34.

16-614 Log #3145 NEC-P16 **Final Action: Accept**
(800.53)

Submitter: Michael I. Callanan, IBEW

Comment on Proposal No: 16-138

Recommendation: Continue to reject.

Substantiation: I agree with the panel action to reject proposal 16-138. No technical substantiation has been provided that a change to the 2002 NEC language is needed or required. This comment represents the official position of the International Brotherhood of Electrical Workers Codes and Standards Committee.

Panel Meeting Action: Accept

Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:

"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."

This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.

Number Eligible to Vote: 15

Ballot Results: Affirmative: 13 Abstain: 2

Comment on Affirmative:

OHDE: See my Affirmative Comment for Comment 16-34.

Explanation of Abstention:

DORNA: See my Explanation of Abstention for Comment 16-34.

KAHN: See my Explanation of Abstention on Comment 16-34.

16-615 Log #3569 NEC-P16 **Final Action: Accept in Part**
(800.53)

Note: See the Technical Correlating Committee Note on Comment 16-452.

Submitter: James R. Hoover, DuPont, Electronic & Communication Technologies

Comment on Proposal No: 16-112

Recommendation: Continue to accept this proposal in principle. Add a fine print note to 800.53(A) as follows:

FPN: See 8.14.1.5 of NFPA 13 (2002), Installation of Sprinkler Systems, for requirements for sprinklers in concealed spaces containing exposed combustibles.

Substantiation: Section 8.14.1.5 of NFPA 13 (2002), Installation of Sprinkler Systems states:

8.14.1.5 Localized Protection of Exposed Combustible Construction or Exposed Combustibles. In concealed spaces having exposed combustible construction, or containing exposed combustibles, in localized areas, the combustibles shall be protected as follows:

(1) If the exposed combustibles are in the vertical partitions or walls around all or a portion of the enclosure, a single row of sprinklers spaced not over 12 ft (3.7 m) apart nor more than 6 ft (1.8 m) from the inside of the partition shall be permitted to protect the surface. The first and last sprinklers in such a row shall not be over 5 ft (1.5 m) from the ends of the partitions.

(2) If the exposed combustibles are in the horizontal plane, the area of the combustibles shall be permitted to be protected with sprinklers on a light hazard spacing. Additional sprinklers shall be installed no more than 6 ft (1.8 m) outside the outline of the area and not more than 12 ft (1.8 m) on center along the outline. When the outline returns to a wall or other obstruction, the last sprinkler shall not be more than 6 ft (1.8 m) from the wall or obstruction.

The definition of combustible, from NFPA 5000 is:

3.3.340.2 Combustible (Material). A material that, in the form in which it is used and under the conditions anticipated, will ignite and burn; a material that does not meet the definition of noncombustible or limited-combustible.

3.3.340.10* Limited-Combustible (Material). Refers to a building construction material not complying with the definition of noncombustible material (see 3.3.340.11) that, in the form in which it is used, has a potential heat value not exceeding 3500 Btu/lb (8141 kJ/kg), where tested in accordance with NFPA 259 and includes (1) materials having a structural base of noncombustible material, with a surfacing not exceeding a thickness of 1.8 in. (3.2 mm) that has a flame spread index not greater than 50; and (2) materials, in the form and thickness used, other than as described in (1), having neither a flame spread index greater than 25 nor evidence of continued progressive combustion, and of such composition that surfaces that would be exposed by cutting through material on any plane would have neither a flame spread index greater than 25 nor evidence of continued progressive combustion. [**220:**2.1]

3.3.340.11 Noncombustible Material. A material that, in the form in which it is used and under the conditions anticipated, will not ignite, burn, support combustion, or release flammable vapors, when subjected to fire or heat. Materials that are reported as passing ASTM E 136 are considered noncombustible materials.

Since conventional plenum cables are combustible materials, sprinklers may be required when these cables are installed in concealed spaces in a building with a sprinkler system designed to meet NFPA 13. This Fine Print Note will alert building owners to refer to NFPA 13.

Per the NFPA/NFPRF Technical Report entitled "International Limited Combustible Plenum Cable Fire Test Project", March 2001, there is a very large difference in fire safety performance between plenum cables just meeting the Combustible-Exception requirements and those meeting the much safer Limited Combustible plenum cable requirements per NFPA 90A 2002:

1) Duct cables = Limited Combustibles cables = FHC 25/50/8 (Fire Spread Index / Smoke Developed Index / Potential Heat)

2) Combustible - Exception cables = FHC 25/850 (Fire Spread Index / Smoke Developed Index / "No" Potential Heat requirement)

The NFPA 13 requirements for plenum-sprinklers in sprinklered buildings with Combustible-Exception plenum cables presents recognize the additions fire safety hazards that these combustible plenum cables represent.

Panel Meeting Action: Accept in Part

Add a fine print note to 800.53(A) as follows:

"FPN: See 8.14.1.5 of NFPA 13 (2002), Installation of Sprinkler Systems, for requirements for sprinklers in concealed spaces containing exposed combustibles."

Panel Statement: The panel rejects the recommendation to continue to accept Proposal 16-112 in principle, in accordance with Standards Council Decision Number 03-10-25.

Number Eligible to Vote: 15

Ballot Results: Affirmative: 12 Negative: 3

Explanation of Negative:

JENSEN: I agree with rejecting proposals 16-37, 16-112 and 16-177 in accordance with Standards Council Decision 03-10-25.

As for the FPN, cables and raceways are not the ONLY "noncombustible material" inside ducts, plenums, and other air-handling spaces.

If a building uses an NFPA 13 compliant sprinkler system, then all combustible material (anything, according to NFPA 5000 3.3.340.11, that does not meet ASTM E 136) including "cables and raceways installed in other spaces used for environmental air" will end up with sprinkler protection.

If the owner chooses to avoid installing NFPA 13 compliant sprinkler system protection, then the owner can address this requirement by other means. See 300.22 (C)(1) "...Other types of cables and conductors shall be installed in electrical metallic tubing, flexible metallic tubing, intermediate metal conduit, rigid metal conduit without an overall nonmetallic covering, flexible metal conduit, or, where accessible, surface metal raceway or metal wireway with metal covers or solid bottom metal cable tray with solid metal covers."

This is a design decision on the part of the owner.

If the commenter feels strongly that a FPN sending the reader to NFPA 13 is required, they should resubmit the text as a proposal to change 300.22 during the 2008 revision cycle. JONES: The substantiation provided in the associated Proposal 16-112 used NFPA 90A as part of the reason for the suggested change. The Standards Council made a decision that is identified as Number 03-10-25 plus subsequent letter by the Standards Council Chairman, Phillip DiNenno to Mr. Loren Caudill, dated December 3, 2003, which stated, in pertinent part as follows:

"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."

OHDE: See my Explanation of Negative vote on Comment 16-129.

16-616 Log #3715 NEC-P16 **Final Action: Accept**
(800.53)

Submitter: Marcelo M. Hirschler, GBH International / Rep. Fire Retardant Chemicals Association

Comment on Proposal No: 16-138

Recommendation: Continue rejecting this proposal and make no changes in the terminology of plenum spaces or of "other spaces used for environmental air".

Substantiation: The terminology in NEC 2002 is correct and needs no change. See also the substantiation for my comments on proposal 16-59.

Panel Meeting Action: Accept

Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:

"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."

This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.

Number Eligible to Vote: 15

Ballot Results: Affirmative: 13 Abstain: 2

Comment on Affirmative:

OHDE: See my Affirmative Comment for Comment 16-34.

Explanation of Abstention:

DORNA: See my Explanation of Abstention for Comment 16-34.

KAHN: See my Explanation of Abstention on Comment 16-34.

16-617 Log #3803 NEC-P16 **Final Action: Accept**
(800.53)

Note: See the Technical Correlating Committee Note on Comment 16-452.

Submitter: Marcelo M. Hirschler, GBH International / Rep. Fire Retardant Chemicals Association

Comment on Proposal No: 16-139

Recommendation: *Reject this proposal - Also reject the references to NFPA 90A in fine print notes and the creation of the new category of air duct cables and the subdivision of plenums. Revise the FPN to 800.51 as follows, and make no other changes.*

~~FPN: One method of defining low smoke-producing cables is by establishing an acceptable value of the smoke produced when tested in accordance with NFPA 262-1999, Standard Method of Test for Flame Travel and Smoke of Wires and Cables for Use in Air-Handling Spaces, to a maximum peak optical density of 0.5 and a maximum average optical density of 0.15. Similarly, one method of defining fire-resistant cables is by defining maximum allowable flame travel distance of 1.52 m (5 ft) when tested in accordance with the same test.~~

FPN: One method of defining a cable that is low smoke-producing cable and fire-resistant cable is that the cable exhibits a maximum peak optical density of 0.5 or less, an average optical density of 0.15 or less, and a maximum flame spread distance of 1.52 m (5 ft) or less when tested in accordance with NFPA 262, Standard Method of Test for Flame Travel and Smoke of Wires and Cables for Use in Air-Handling Spaces.

Substantiation: There is no need for a new category of CMD cables. There is also no justification for limiting the use of traditional plenum cables. It has become clear now that the expertise needed for choosing the type of wiring systems permitted in any space should be the prerogative of the NEC, which (through its various panels and its Technical Correlating Committee) has greater expertise and a broader view than the Technical Committee on Air Conditioning (responsible for NFPA 90A). Therefore, the NEC panels should continue making their own choices regarding wiring methods. The issue of correlation (or even reference) to either NFPA 90A or the categories of plenums used in NFPA 90A should be rejected by CMP 16.

Furthermore, the reference to NFPA 90A is not appropriate in the Fine Print Note, since NFPA 90A is not a suitable standard for testing or listing wiring methods. The logical way to have a fine print note is to reference the standard used for testing the fire safety of the materials, which in this case is a combination of NFPA 255 and NFPA 259, or the UL Subject 2424 that contains all the listing requirements.

See further information in the comment I made to recommend rejection of proposal 16-112.

Panel Meeting Action: Accept

Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:

"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."

This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.
Number Eligible to Vote: 15
Ballot Results: Affirmative: 13 Abstain: 2
Comment on Affirmative:
OHDE: See my Affirmative Comment for Comment 16-34.
Explanation of Abstention:
DORNA: See my Explanation of Abstention for Comment 16-34.
KAHN: See my Explanation of Abstention on Comment 16-34.

16-618 Log #2222 NEC-P16 **Final Action: Accept**
(800.53, Figure 800-53 and Table 800-53)

Note: See the Technical Correlating Committee Note on Comment 16-452.
Submitter: T. David Mills, Bechtel Savannah River, Inc.
Comment on Proposal No: 16-139
Recommendation: Reject proposal in its entirety.
Substantiation:NFPA 90A - 2002 only places a restriction for cables and for testing per NFPA 262 for ceiling cavity plenums (4.3.10.2.6.1) and raised floor plenums (4.3.10.6.5.1). It does not state that these are the only places that this plenum rated cable can be used.
The other sections of NFPA 90A related to all other air spaces including "air ducts" are silent with respect to cable requirements. This indicates plenum rated cables can be placed anywhere in the air conditioning air handling system without any new "Duct" designator. There are not any other requirements in NFPA 90A to indicate anywhere that a "does not correlate" situation exists between NFPA 70 and NFPA 90A.
There is no need for any additional environmental air space identifiers or cable type designators.
Panel Meeting Action: Accept
Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:
"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."
This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.
Number Eligible to Vote: 15
Ballot Results: Affirmative: 13 Abstain: 2
Comment on Affirmative:
OHDE: See my Affirmative Comment for Comment 16-34.
Explanation of Abstention:
DORNA: See my Explanation of Abstention for Comment 16-34.
KAHN: See my Explanation of Abstention on Comment 16-34.

16-619 Log #2488 NEC-P16 **Final Action: Accept**
(800.53, Figure 800-53 and Table 800-53)

Note: See the Technical Correlating Committee Note on Comment 16-452.
Submitter: William A. Wolfe, Steel Tube Institute of North America
Comment on Proposal No: 16-139
Recommendation: Reject this proposal.
Substantiation: See our companion proposal on 16-37.
Panel Meeting Action: Accept
Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:
"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."
This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.
Number Eligible to Vote: 15
Ballot Results: Affirmative: 13 Abstain: 2
Comment on Affirmative:
OHDE: See my Affirmative Comment for Comment 16-34.
Explanation of Abstention:
DORNA: See my Explanation of Abstention for Comment 16-34.
KAHN: See my Explanation of Abstention on Comment 16-34.

16-620 Log #2823 NEC-P16 **Final Action: Reject**
(800.53, Figure 800-53 and Table 800-53)

Submitter: Richard P. Owen, City of St. Paul, Minnesota
Comment on Proposal No: 16-139
Recommendation: Continue to accept this proposal in principle.
Substantiation: The Panel 3/Panel 16 Task Group, appointed by the NEC TCC, developed this comment.
The task group agrees with Panel 16's action and statement.
The NEC TCC Task Group on Correlation Issues Between Panels 3 and 16 met three times via teleconference calls. The assignment by the TCC Chairman was to attempt to develop a resolution and accompanying comments for the different actions taken on proposals dealing with similar issues by CMP 3 and CMP 16 for their respective Articles in Chapters 7 and 8 of the NEC.
The Task Group studied the issues and determined that there were five major differences in the actions on proposals concerning Articles 725, 760, 770, 800, 820, and 830. The voting on these issues was not unanimous but did pass as at least a simple majority of the Task Group.
One of the major differences involved installing air duct cables in a fabricated air duct without enclosing the cable in a metal raceway.
The Task Group members who attended the teleconference call voted to accept text that permits "air duct cable" to be installed in fabricated ducts without enclosing in an additional metal raceway or metal cable. The text to be accepted by Panel 3 is recommended to be similar to that found in Proposals 3-194 for Article 725 and 3-288 for Article 760. The "air duct cable" will replace the plenum cable that was previously acceptable in fabricated duct without enclosing in a metal raceway or metal cable assembly.
The following members of Panels 3 and 16 participated in this Task Group assignment: From Panel 3, Mr. Sanford E. Egesdal representing the Automatic Fire Alarm Association, Inc., Mr. Ronald E. Maassen representing the National Electrical Contractors Association, and Mr. Mark C. Ode representing Underwriters Laboratories Inc. From Panel 16, Mr. Robert W. Jensen representing the Building Industry Consulting Services International, Mr. Harold C. Ohde representing the International Brotherhood of Electrical Workers, and Mr. Joseph W. Rao representing the Independent Electrical Contractors, Inc. Mr. Richard P. Owen, the Chairman of CMP 3, representing the International Association of Electrical Inspectors, was the chairman of the Task Group.
Panel Meeting Action: Reject
Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:
"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."
This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.
Number Eligible to Vote: 15
Ballot Results: Affirmative: 13 Abstain: 2
Comment on Affirmative:
OHDE: See my Affirmative Comment for Comment 16-34.
Explanation of Abstention:
DORNA: See my Explanation of Abstention for Comment 16-34.
KAHN: See my Explanation of Abstention on Comment 16-34.

16-621 Log #3146 NEC-P16 **Final Action: Accept**
(800.53, Figure 800.53, and Table 800.53)

Note: See the Technical Correlating Committee Note on Comment 16-452.
Submitter: Michael I. Callanan, IBEW
Comment on Proposal No: 16-139
Recommendation: Reject this proposal.
Substantiation: This proposal should be rejected as we agree with the explanation of negative of Mr. Jensen, Mr. Jones, and Mr. Ohde. This comment represents the official position of the International Brotherhood of Electrical Workers Codes and Standards Committee.
Panel Meeting Action: Accept
Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:
"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that

interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."

This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.

Number Eligible to Vote: 15
Ballot Results: Affirmative: 13 Abstain: 2
Comment on Affirmative:
OHDE: See my Affirmative Comment for Comment 16-34.
Explanation of Abstention:
DORNA: See my Explanation of Abstention for Comment 16-34.
KAHN: See my Explanation of Abstention on Comment 16-34.

16-622 Log #2518yyy NEC-P16 **Final Action: Accept**
(800.53, Figure 800.53, Table 800.53)

Note: See the Technical Correlating Committee Note on Comment 16-452.
Submitter: Vince Baclawski, National Electrical Manufacturers Association (NEMA)
Comment on Proposal No: 16-139
Recommendation: Reject this proposal.
Substantiation: See our companion comment on Proposal 1-69.
Panel Meeting Action: Accept
Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:

"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."

This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.

Number Eligible to Vote: 15
Ballot Results: Affirmative: 13 Abstain: 2
Comment on Affirmative:
OHDE: See my Affirmative Comment for Comment 16-34.
Explanation of Abstention:
DORNA: See my Explanation of Abstention for Comment 16-34.
KAHN: See my Explanation of Abstention on Comment 16-34.

16-623 Log #3488 NEC-P16 **Final Action: Accept in Principle**
(800.53, FPN)

Note: See the Technical Correlating Committee Note on Comment 16-452.
Submitter: James R. Hoover, DuPont, Electronic & Communication Technologies
Comment on Proposal No: 16-112
Recommendation: Continue to accept this proposal in principle. Add a fine print note to 800.53(A) as follows:

FPN: See section 8.14.1.5 of NFPA 13 (2002), Installation of Sprinkler Systems, for requirements for sprinklers in concealed spaces containing exposed combustibles.

Substantiation: Section 8.14.1.5 of NFPA 13 (2002), Installation of Sprinkler Systems states:

8.14.1.5 Localized Protection of Exposed Combustible Construction or Exposed Combustibles. In concealed spaces having exposed combustible construction, or containing exposed combustibles, in localized areas, the combustibles shall be protected as follows:

(1) If the exposed combustibles are in the vertical partitions or walls around all or a portion of the enclosure, a single row of sprinklers spaced not over 12 ft (3.7 m) apart nor more than 6 ft (1.8 m) from the inside of the partition shall be permitted to protect the surface. The first and last sprinklers in such a row shall not be over 5 ft (1.5 m) from the ends of the partitions.

(2) If the exposed combustibles are in the horizontal plane, the area of the combustibles shall be permitted to be protected with sprinklers on a light hazard spacing. Additional sprinklers shall be installed no more than 6 ft (1.8 m) outside the outline of the area and not more than 12 ft (3.7 m) on center along the outline. When the outline returns to a wall or other obstruction, the last sprinkler shall not be more than 6 ft (1.8 m) from the wall or obstruction.

The definition of combustible, from NFPA 5000 is:

3.3.340.2 Combustible(Material). A material that, in the form in which it is used and under the conditions anticipated, will ignite and burn; a material that does not meet the definition of noncombustible or limited-combustible.

3.3.340.10* Limited-Combustible (Material). Refers to a building construction material not complying with the definition of noncombustible material (see 3.3.340.11) that, in the form in which it is used, has a potential heat value not exceeding 3500 Btu/lb 8141 kJ/kg), where tested in accordance with NFPA 259 and includes (1) materials having a structural base of noncombustible material, with a surfacing not exceeding a thickness of 1.8 in. (3.2 mm) that has a flame spread index not greater than 50; and (2) materials, in the form and thickness used, other than as described in (1), having neither a flame spread index greater than 25 nor evidence of continued progressive combustion, and of such composition that surfaces that would be exposed by cutting through the material on any plane would have neither a flame spread index greater than 25 nor evidence of continued progressive combustion. [220: 2.1]

3.3.340.11 Noncombustible Material. A material that, in the form in which it is used and under the conditions anticipated, will not ignite, burn, support combustion, or release flammable in vapors, when subjected t fire or heat. Materials that are reported as passing ASTM E136 are considered noncombustible materials.

Since conventional plenum cables are combustible materials, sprinklers may be required when these cables are installed in concealed spaces in a building with a sprinkler system designed to meet NFPA 13. This fine print note will alert building owners to refer to NFPA 13.

Per the NFPA/NFPRF Technical Report entitled "International Limited Combustible Plenum Cable Fire Test Project", March 2001, there is a very large difference in fire safety performance between plenum cables just meeting the combustible-exception requirements and those meeting the much safer limited combustible plenum cable requirements per NFPA 90A 2002:

1) Duct cables - Limited combustible cables = FHC 25/50/8 (Fire Spread Index/Smoke Developed Index/Potential Heat)

2) Combustible - Exception cables = FHC 25/850 (Fire Spread Index/ Smoke Developed Index/ "No" Potential Heat requirement)

The NFPA 13 requirements for plenum-sprinklers in sprinklered buildings with combustible-exception plenum cables presents recognize the additions fire safety hazards that these combustible plenum cables represent.

Panel Meeting Action: Accept in Principle
Panel Statement: See panel action and statement on Comment 16-615.
Number Eligible to Vote: 15
Ballot Results: Affirmative: 12 Negative: 3
Explanation of Negative:
JENSEN: I agree with rejecting proposals 16-37, 16-112 and 16-177 in accordance with Standards Council Decision 03-10-25.

As for the FPN, cables and raceways are not the ONLY "noncombustible material" inside ducts, plenums, and other air-handling spaces.

If a building uses an NFPA 13 compliant sprinkler system, then all combustible material (anything, according to NFPA 5000 3.3.340.11, that does not meet ASTM E 136) including "cables and raceways installed in other spaces used for environmental air" will end up with sprinkler protection.

If the owner chooses to avoid installing NFPA 13 compliant sprinkler system protection, then the owner can address this requirement by other means. See 300.22 (C)(1) "...Other types of cables and conductors shall be installed in electrical metallic tubing, flexible metallic tubing, intermediate metal conduit, rigid metal conduit without an overall nonmetallic covering, flexible metal conduit, or, where accessible, surface metal raceway or metal wireway with metal covers or solid bottom metal cable tray with solid metal covers."

This is a design decision on the part of the owner.

If the commenter feels strongly that a FPN sending the reader to NFPA 13 is required, they should resubmit the text as a proposal to change 300.22 during the 2008 revision cycle. JONES: The substantiation provided in the associated Proposal 16-112 used NFPA 90A as part of the reason for the suggested change. The Standards Council made a decision that is identified as Number 03-10-25 plus subsequent letter by the Standards Council Chairman, Phillip DiNenno to Mr. Loren Caudill, dated December 3, 2003, which stated, in pertinent part as follows:

"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."

OHDE: See my Explanation of Negative vote on Comment 16-129.

16-624 Log #322 NEC-P16 **Final Action: Reject**
(Figure 800.53, 800.53, Table 800.53)

Submitter: Technical Committee on Air Conditioning
Comment on Proposal No: 16-139
Recommendation: Continue to accept this proposal in principle.
Substantiation: See the comment from the Technical committee on Air Conditioning on proposal 16-112.
Panel Meeting Action: Reject
Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:

"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."

This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.

Number Eligible to Vote: 15
Ballot Results: Affirmative: 13 Abstain: 2
Comment on Affirmative:
OHDE: See my Affirmative Comment for Comment 16-34.
Explanation of Abstention:
DORNA: See my Explanation of Abstention for Comment 16-34.
KAHN: See my Explanation of Abstention on Comment 16-34.

16-625 Log #2752 NEC-P16 **Final Action: Reject**
(Figure 800.53, 800.53, Table 800.53)

Submitter: Richard Fransen, Daikin America, Inc. / Rep. Cable Fire Research Association
Comment on Proposal No: 16-139
Recommendation: Continue to accept this proposal in principle.
Substantiation: See the comment from CFRA on proposal 16-112.
Panel Meeting Action: Reject
Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:

"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."

This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.

Number Eligible to Vote: 15
Ballot Results: Affirmative: 13 Abstain: 2
Comment on Affirmative:
OHDE: See my Affirmative Comment for Comment 16-34.
Explanation of Abstention:
DORNA: See my Explanation of Abstention for Comment 16-34.
KAHN: See my Explanation of Abstention on Comment 16-34.

16-626 Log #826 NEC-P16 **Final Action: Accept**
(800.53(A))

Submitter: Technical Correlating Committee on National Electrical Code®
Comment on Proposal No: 16-142
Recommendation: The Technical Correlating Committee directs that the Panel clarify the Panel Action on this Proposal to correlate with the action on Proposal 16-141 that deleted this text. This action will be considered by the Panel as a Public Comment.
Substantiation: This is a direction from the National Electrical Code Technical Correlating Committee in accordance with 3-4.2 and 3-4.3 of the Regulations Governing Committee Projects.
Panel Meeting Action: Accept
Panel Statement: CMP 16 accepts the direction of the TCC to review Proposal 16-142.

CMP 16 action on Proposal 16-75 established a new 800.3 "Other Articles" and provides the requirement for the removal of the accessible portion of abandoned communications cable.

Proposal 16-75 accomplishes the submitter's intent by stating the requirement only once in the proposed 2005 NEC, in Article 800, Section 800.3(C) (New). CMP 16 actions on Proposals 16-141 and 16-142 avoid duplication of this requirement.

The requirement to remove the accessible portion of abandoned cable is covered in 800.3(C) (New).

Number Eligible to Vote: 15
Ballot Results: Affirmative: 14 Negative: 1
Explanation of Negative:
OHDE: See my Explanation of Negative vote on Comment 16-603.

16-627 Log #1318 NEC-P16 **Final Action: Reject**
(800.53(A))

Submitter: Wayne G. Carson, Carson Assoc. Inc.
Comment on Proposal No: 16-142a
Recommendation: Reject proposal.
Substantiation: This proposal makes a change in the removal of abandoned cables only that are accessible. This will cause considerable debate about what is accessible. There was no technical justification provided as to why this change is necessary.
Panel Meeting Action: Reject
Panel Statement: The submitter's comment deals with abandoned cables, whereas Proposal 16-142a deals with raceways.
Number Eligible to Vote: 15
Ballot Results: Affirmative: 15

16-628 Log #1459 NEC-P16 **Final Action: Reject**
(800.53(A))

Submitter: Technical Correlating Committee on Signaling Systems for the Protection of Life and Property
Comment on Proposal No: 16-143
Recommendation: Continue to accept in principle.
Substantiation: See our comment on proposal 16-65.
Panel Meeting Action: Reject
Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:

"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."

This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.

Number Eligible to Vote: 15
Ballot Results: Affirmative: 13 Abstain: 2
Comment on Affirmative:
OHDE: See my Affirmative Comment for Comment 16-34.
Explanation of Abstention:
DORNA: See my Explanation of Abstention for Comment 16-34.
KAHN: See my Explanation of Abstention on Comment 16-34.

16-629 Log #1460 NEC-P16 **Final Action: Reject**
(800.53(A))

Submitter: Technical Correlating Committee on Signaling Systems for the Protection of Life and Property
Comment on Proposal No: 16-144
Recommendation: Continue to accept in principle.
Substantiation: See our comment on proposal 16-65.
Panel Meeting Action: Reject
Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:

"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."

This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.

Number Eligible to Vote: 15
Ballot Results: Affirmative: 13 Abstain: 2
Comment on Affirmative:
OHDE: See my Affirmative Comment for Comment 16-34.
Explanation of Abstention:
DORNA: See my Explanation of Abstention for Comment 16-34.
KAHN: See my Explanation of Abstention on Comment 16-34.

16-630 Log #1461 NEC-P16 **Final Action: Reject**
(800.53(A))

Submitter: Technical Correlating Committee on Signaling Systems for the Protection of Life and Property
Comment on Proposal No: 16-145
Recommendation: Continue to accept in principle.
Substantiation: See our comment on proposal 16-65.
Panel Meeting Action: Reject
Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:

"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."

This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.
Number Eligible to Vote: 15
Ballot Results: Affirmative: 13 Abstain: 2
Comment on Affirmative:
OHDE: See my Affirmative Comment for Comment 16-34.
Explanation of Abstention:
DORNA: See my Explanation of Abstention for Comment 16-34.
KAHN: See my Explanation of Abstention on Comment 16-34.

16-631 Log #1467 NEC-P16 **Final Action: Accept**
(800.53(A))

Note: See the Technical Correlating Committee Note on Comment 16-452.
Submitter: Marcelo M. Hirschler, GBH International / Rep. Fire Retardant Chemicals
Comment on Proposal No: 16-142a
Recommendation: Reject this proposal.

800.53 Applications of Listed Communications Wires and Cables and Communications Raceways.
Communications wires and cables shall comply with the requirements of 800.53(A) through (F)
or where cable substitutions are made in accordance with 800.53(G).

(A) Plenum. Cables installed in ducts, plenums, and other spaces used for environmental air shall be Type CMP. Abandoned cables shall not be permitted to remain. Types CMP, CMR, CMG, CM, and CMX and communications wire installed in compliance with 300.22 shall be permitted. Listed plenum communications raceways shall be permitted to be installed ~~in ceiling cavity plenums and raised floor plenums~~ ducts and plenums as described in 300.22(B) and in other spaces used for environmental air as described in 300.22(C). Only Type CMD and CMP cable shall be permitted to be installed in these raceways.

No change to (B) through (G)
Substantiation: • This comment recommends rejection of a subdivision of "other spaces used for environmental air" and rejection of granting priority to NFPA 90A on choices of wiring methods.

• The input from CMP 3 and from the NEC Technical Coordinating Committee makes it clear that the terminology used in 300.22 has served the NEC well and needs no change. It has also become clear now that the expertise needed for choosing the type of wiring systems permitted in any space should be the prerogative of the NEC, which (through its various panels and its Technical Correlating Committee) has greater expertise and a broader view than the Technical Committee on Air Conditioning (responsible for NFPA 90A). Therefore, the NEC panels should continue making their own choices regarding wiring methods.

• It has already been shown in detail by the fire hazard and fire risk analysis presented together with my original proposals (see for example the section on pages 2080-2091 of the NEC-ROP of the substantiation for my proposal 3-130) that there is no need to change the requirements, or limit the application, for wiring methods in plenums, because the fire safety record is excellent.

• The new class of CMD cables should not be approved. Therefore CMD cables should not be included in this section (see also my comment on proposal 16-112).
Panel Meeting Action: Accept
Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:

"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."

This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.
Number Eligible to Vote: 15
Ballot Results: Affirmative: 13 Abstain: 2
Comment on Affirmative:
OHDE: See my Affirmative Comment for Comment 16-34.
Explanation of Abstention:
DORNA: See my Explanation of Abstention for Comment 16-34.
KAHN: See my Explanation of Abstention on Comment 16-34.

16-632 Log #1493 NEC-P16 **Final Action: Accept**
(800.53(A))

Note: See the Technical Correlating Committee Note on Comment 16-106.
Submitter: Marcelo M. Hirschler, GBH International / Rep. Fire Retardant Chemicals
Comment on Proposal No: 16-64
Recommendation: Continue rejecting this proposal.
Substantiation: • This comment recommends rejection of a subdivision of "other spaces used for environmental air" and continued rejection of granting priority to NFPA 90A on choices of wiring methods.

• The input from CMP 3 and from the NEC Technical Coordinating Committee makes it clear that the terminology used in 300.22 has served the NEC well and needs no change. It has also become clear now that the expertise needed for choosing the type of wiring systems permitted in any space should be the prerogative of the NEC, which (through its various panels and its Technical Correlating Committee) has greater expertise and a broader view than the Technical Committee on Air Conditioning (responsible for NFPA 90A). Therefore, the NEC panels should continue making their own choices regarding wiring methods.

• It has already been shown in detail by the fire hazard and fire risk analysis presented together with my original proposals (see for example the section on pages 2080-2091 of the NEC-ROP of the substantiation for my proposal 3-130) that there is no need to change the requirements, or limit the application, for wiring methods in plenums, because the fire safety record is excellent.

• I understand that this comment represents a change in some of the concepts the submitter believed when the proposal was submitted, but "even old dogs can learn".
Panel Meeting Action: Accept
Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:

"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."

This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.
Number Eligible to Vote: 15
Ballot Results: Affirmative: 13 Abstain: 2
Comment on Affirmative:
OHDE: See my Affirmative Comment for Comment 16-34.
Explanation of Abstention:
DORNA: See my Explanation of Abstention for Comment 16-34.
KAHN: See my Explanation of Abstention on Comment 16-34.

16-633 Log #1625 NEC-P16 **Final Action: Reject**
(800.53(A))

Submitter: Richard P. Owen, City of St. Paul, Minnesota
Comment on Proposal No: 16-144
Recommendation: Continue to Accept this Proposal in Principle.
Substantiation: The Panel 3/Panel 16 Task Group, appointed by the NEC TCC, developed this comment.

The task group agrees with Panel 16's action and statement.

The NEC TCC Task Group on Correlation Issues Between Panels 3 and 16 met three times via teleconference calls. The assignment by the TCC Chairman was to attempt to develop a resolution and accompanying comments for the different actions taken on proposals dealing with similar issues by CMP 3 and CMP 16 for their respective Articles in Chapters 7 and 8 of the NEC.

The Task Group studied the issues and determined that there were five major differences in the actions on proposals concerning Articles 725, 760, 770, 800, 820, and 830. The voting on these issues was not unanimous but did pass as at least a simple majority of the Task Group.

One of the major differences involved whether to require air duct cable in a raised floor or ceiling cavity plenum where the cable cannot be extracted upon abandonment. This would reduce fuel load in air handling spaces where cables must remain in place when abandoned by installing a cable with a much lower fire and combustible fuel load in these areas.

The Task Group members who attended the teleconference call voted to accept text that requires cables in non-accessible raised floor and ceiling cavity plenums to be "air duct cables." Comments will be written to incorporate similar text for the articles under the jurisdiction of Panel 3 that will be similar or the same action on this issue as that taken by Panel 16.

The following members of Panels 3 and 16 participated in this Task Group assignment: From Panel 3, Mr. Sanford E. Egesdal representing the Automatic Fire Alarm Association, Inc., Mr. Ronald E. Maassen representing the National Electrical Contractors Association, and Mr. Mark C. Ode representing Underwriters Laboratories Inc. From Panel 16, Mr. Robert W. Jensen representing the Building Industry Consulting Services International, Mr. Harold C. Ohde representing the International Brotherhood of Electrical Workers, and Mr. Joseph W. Rao representing the Independent Electrical Contractors, Inc. Mr. Richard P. Owen, the Chairman of CMP 3, representing the International Association of Electrical Inspectors, was the chairman of the Task Group.

Panel Meeting Action: Reject

Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:

"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."

This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.

Number Eligible to Vote: 15

Ballot Results: Affirmative: 13 Abstain: 2

Comment on Affirmative:

OHDE: See my Affirmative Comment for Comment 16-34.

Explanation of Abstention:

DORNA: See my Explanation of Abstention for Comment 16-34.

KAHN: See my Explanation of Abstention on Comment 16-34.

16-634 Log #1626 NEC-P16 **Final Action: Reject**
(800.53(A))

Submitter: Richard P. Owen, City of St. Paul, Minnesota

Comment on Proposal No: 16-145

Recommendation: Continue to Accept this Proposal in Principle.

Substantiation: The Panel 3/Panel 16 Task Group, appointed by the NEC TCC, developed this comment.

The task group agrees with Panel 16's action and statement.

The NEC TCC Task Group on Correlation Issues Between Panels 3 and 16 met three times via teleconference calls. The assignment by the TCC Chairman was to attempt to develop a resolution and accompanying comments for the different actions taken on proposals dealing with similar issues by CMP 3 and CMP 16 for their respective Articles in Chapters 7 and 8 of the NEC.

The Task Group studied the issues and determined that there were five major differences in the actions on proposals concerning Articles 725, 760, 770, 800, 820, and 830. The voting on these issues was not unanimous but did pass as at least a simple majority of the Task Group.

One of the major differences involved whether to require air duct cable in a raised floor or ceiling cavity plenum where the cable cannot be extracted upon abandonment. This would reduce fuel load in air handling spaces where cables must remain in place when abandoned by installing a cable with a much lower fire and combustible fuel load in these areas.

The Task Group members who attended the teleconference call voted to accept text that requires cables in non-accessible raised floor and ceiling cavity plenums to be "air duct cables." Comments will be written to incorporate similar text for the articles under the jurisdiction of Panel 3 that will be similar or the same action on this issue as that taken by Panel 16.

The following members of Panels 3 and 16 participated in this Task Group assignment: From Panel 3, Mr. Sanford E. Egesdal representing the Automatic Fire Alarm Association, Inc., Mr. Ronald E. Maassen representing the National Electrical Contractors Association, and Mr. Mark C. Ode representing Underwriters Laboratories Inc. From Panel 16, Mr. Robert W. Jensen representing the Building Industry Consulting Services International, Mr. Harold C. Ohde representing the International Brotherhood of Electrical Workers, and Mr. Joseph W. Rao representing the Independent Electrical Contractors, Inc. Mr. Richard P. Owen, the Chairman of CMP 3, representing the International Association of Electrical Inspectors, was the chairman of the Task Group.

Panel Meeting Action: Reject

Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:

"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."

This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.

Number Eligible to Vote: 15

Ballot Results: Affirmative: 13 Abstain: 2

Comment on Affirmative:

OHDE: See my Affirmative Comment for Comment 16-34.

Explanation of Abstention:

DORNA: See my Explanation of Abstention for Comment 16-34.

KAHN: See my Explanation of Abstention on Comment 16-34.

16-635 Log #1633 NEC-P16 **Final Action: Reject**
(800.53(A))

Submitter: Richard P. Owen, City of St. Paul, Minnesota

Comment on Proposal No: 16-143

Recommendation: Continue to Accept this Proposal in Principle.

Substantiation: The Panel 3/Panel 16 Task Group, appointed by the NEC TCC, developed this comment.

The task group agrees with Panel 16's action and statement.

The NEC TCC Task Group on Correlation Issues Between Panels 3 and 16 met three times via teleconference calls. The assignment by the TCC Chairman was to attempt to develop a resolution and accompanying comments for the different actions taken on proposals dealing with similar issues by CMP 3 and CMP 16 for their respective Articles in Chapters 7 and 8 of the NEC.

The Task Group studied the issues and determined that there were five major differences in the actions on proposals concerning Articles 725, 760, 770, 800, 820, and 830. The voting on these issues was not unanimous but did pass as at least a simple majority of the Task Group.

One of the major differences involved whether to require air duct cable in a raised floor or ceiling cavity plenum where the cable cannot be extracted upon abandonment. This would reduce fuel load in air handling spaces where cables must remain in place when abandoned by installing a cable with a much lower fire and combustible fuel load in these areas.

The Task Group members who attended the teleconference call voted to accept text that requires cables in non-accessible raised floor and ceiling cavity plenums to be "air duct cables." Comments will be written to incorporate similar text for the articles under the jurisdiction of Panel 3 that will be similar or the same action on this issue as that taken by Panel 16.

The following members of Panels 3 and 16 participated in this Task Group assignment: From Panel 3, Mr. Sanford E. Egesdal representing the Automatic Fire Alarm Association, Inc., Mr. Ronald E. Maassen representing the National Electrical Contractors Association, and Mr. Mark C. Ode representing Underwriters Laboratories Inc. From Panel 16, Mr. Robert W. Jensen representing the Building Industry Consulting Services International, Mr. Harold C. Ohde representing the International Brotherhood of Electrical Workers, and Mr. Joseph W. Rao representing the Independent Electrical Contractors, Inc. Mr. Richard P. Owen, the Chairman of CMP 3, representing the International Association of Electrical Inspectors, was the chairman of the Task Group.

Panel Meeting Action: Reject

Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:

"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."

This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.

Number Eligible to Vote: 15

Ballot Results: Affirmative: 13 Abstain: 2

Comment on Affirmative:

OHDE: See my Affirmative Comment for Comment 16-34.

Explanation of Abstention:

DORNA: See my Explanation of Abstention for Comment 16-34.

KAHN: See my Explanation of Abstention on Comment 16-34.

16-636 Log #1840 NEC-P16 **Final Action: Reject**
(800.53(A))

Submitter: Thomas P. Hammerberg, Automatic Fire Alarm Association
Comment on Proposal No: 16-143
Recommendation: Continue to accept in principle.
Substantiation: See our comment on Proposal 16-65.
Panel Meeting Action: Reject
Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:
"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."
This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.
Number Eligible to Vote: 15
Ballot Results: Affirmative: 13 Abstain: 2
Comment on Affirmative:
OHDE: See my Affirmative Comment for Comment 16-34.
Explanation of Abstention:
DORNA: See my Explanation of Abstention for Comment 16-34.
KAHN: See my Explanation of Abstention on Comment 16-34.

16-637 Log #2233 NEC-P16 **Final Action: Accept**
(800.53(A))

Note: See the Technical Correlating Committee Note on Comment 16-452.
Submitter: T. David Mills, Bechtel Savannah River, Inc.
Comment on Proposal No: 16-143
Recommendation: Reject proposal in its entirety.
Substantiation:NFPA 90A - 2002 only places a restriction for cables and for testing per NFPA 262 for ceiling cavity plenums (4.3.10.2.6.1) and raised floor plenums (4.3.10.6.5.1). It does not state that these are the only places that this plenum rated cable can be used.
The other sections of NFPA 90A related to all other air spaces including "air ducts" are silent with respect to cable requirements. This indicates plenum rated cables can be placed anywhere in the air conditioning air handling system without any new "Duct" designator. There are not any other requirements in NFPA 90A to indicate anywhere that a "does not correlate" situation exists between NFPA 70 and NFPA 90A.
There is no need for any additional environmental air space identifiers or cable type designators.
Panel Meeting Action: Accept
Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:
"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."
This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.
Number Eligible to Vote: 15
Ballot Results: Affirmative: 13 Abstain: 2
Comment on Affirmative:
OHDE: See my Affirmative Comment for Comment 16-34.
Explanation of Abstention:
DORNA: See my Explanation of Abstention for Comment 16-34.
KAHN: See my Explanation of Abstention on Comment 16-34.

16-638 Log #2234 NEC-P16 **Final Action: Accept**
(800.53(A))

Note: See the Technical Correlating Committee Note on Comment 16-452.
Submitter: T. David Mills, Bechtel Savannah River, Inc.
Comment on Proposal No: 16-144
Recommendation: Reject proposal in its entirety.
Substantiation:NFPA 90A - 2002 only places a restriction for cables and for testing per NFPA 262 for ceiling cavity plenums (4.3.10.2.6.1) and raised floor plenums (4.3.10.6.5.1). It does not state that these are the only places that this plenum rated cable can be used.
The other sections of NFPA 90A related to all other air spaces including "air ducts" are silent with respect to cable requirements. This indicates plenum rated cables can be placed anywhere in the air conditioning air handling system without any new "Duct" designator. There are not any other requirements in NFPA 90A to indicate anywhere that a "does not correlate" situation exists between NFPA 70 and NFPA 90A.
There is no need for any additional environmental air space identifiers or cable type designators.
Panel Meeting Action: Accept
Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:
"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."
This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.
Number Eligible to Vote: 15
Ballot Results: Affirmative: 13 Abstain: 2
Comment on Affirmative:
OHDE: See my Affirmative Comment for Comment 16-34.
Explanation of Abstention:
DORNA: See my Explanation of Abstention for Comment 16-34.
KAHN: See my Explanation of Abstention on Comment 16-34.

16-639 Log #2235 NEC-P16 **Final Action: Accept**
(800.53(A))

Note: See the Technical Correlating Committee Note on Comment 16-452.
Submitter: T. David Mills, Bechtel Savannah River, Inc.
Comment on Proposal No: 16-145
Recommendation: Reject proposal in its entirety.
Substantiation:NFPA 90A - 2002 only places a restriction for cables and for testing per NFPA 262 for ceiling cavity plenums (4.3.10.2.6.1) and raised floor plenums (4.3.10.6.5.1). It does not state that these are the only places that this plenum rated cable can be used.
The other sections of NFPA 90A related to all other air spaces including "air ducts" are silent with respect to cable requirements. This indicates plenum rated cables can be placed anywhere in the air conditioning air handling system without any new "Duct" designator. There are not any other requirements in NFPA 90A to indicate anywhere that a "does not correlate" situation exists between NFPA 70 and NFPA 90A.
There is no need for any additional environmental air space identifiers or cable type designators.
Panel Meeting Action: Accept
Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:
"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."
This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.
Number Eligible to Vote: 15
Ballot Results: Affirmative: 13 Abstain: 2
Comment on Affirmative:
OHDE: See my Affirmative Comment for Comment 16-34.
Explanation of Abstention:
DORNA: See my Explanation of Abstention for Comment 16-34.
KAHN: See my Explanation of Abstention on Comment 16-34.

16-640 Log #2491 NEC-P16 **Final Action: Accept**
(800.53(A))

Note: See the Technical Correlating Committee Note on Comment 16-452.
Submitter: William A. Wolfe, Steel Tube Institute of North America
Comment on Proposal No: 16-143
Recommendation: Reject this proposal.
Substantiation: See our companion proposal on 16-37.
Panel Meeting Action: Accept

Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:

"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."

This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.

Number Eligible to Vote: 15
Ballot Results: Affirmative: 13 Abstain: 2
Comment on Affirmative:
OHDE: See my Affirmative Comment for Comment 16-34.
Explanation of Abstention:
DORNA: See my Explanation of Abstention for Comment 16-34.
KAHN: See my Explanation of Abstention on Comment 16-34.

16-641 Log #2493 NEC-P16 **Final Action: Accept**
(800.53(A))

Note: See the Technical Correlating Committee Note on Comment 16-452.
Submitter: William A. Wolfe, Steel Tube Institute of North America
Comment on Proposal No: 16-144
Recommendation: Reject this proposal.
Substantiation: See our companion proposal on 16-37.
Panel Meeting Action: Accept
Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:

"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."

This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.

Number Eligible to Vote: 15
Ballot Results: Affirmative: 13 Abstain: 2
Comment on Affirmative:
OHDE: See my Affirmative Comment for Comment 16-34.
Explanation of Abstention:
DORNA: See my Explanation of Abstention for Comment 16-34.
KAHN: See my Explanation of Abstention on Comment 16-34.

16-642 Log #2753 NEC-P16 **Final Action: Reject**
(800.53(A))

Submitter: Richard Fransen, Daikin America, Inc. / Rep. Cable Fire Research Association
Comment on Proposal No: 16-143
Recommendation: Continue to accept this proposal in principle.
Substantiation: CFRA agrees with the panel action.
Panel Meeting Action: Reject
Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:

"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."

This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.

Number Eligible to Vote: 15
Ballot Results: Affirmative: 13 Abstain: 2
Comment on Affirmative:
OHDE: See my Affirmative Comment for Comment 16-34.
Explanation of Abstention:
DORNA: See my Explanation of Abstention for Comment 16-34.
KAHN: See my Explanation of Abstention on Comment 16-34.

16-643 Log #2754 NEC-P16 **Final Action: Reject**
(800.53(A))

Submitter: Richard Fransen, Daikin America, Inc. / Rep. Cable Fire Research Association
Comment on Proposal No: 16-144
Recommendation: Continue to accept this proposal in principle.
Substantiation: CFRA agrees with the panel action.
Panel Meeting Action: Reject
Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:

"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."

This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.

Number Eligible to Vote: 15
Ballot Results: Affirmative: 13 Abstain: 2
Comment on Affirmative:
OHDE: See my Affirmative Comment for Comment 16-34.
Explanation of Abstention:
DORNA: See my Explanation of Abstention for Comment 16-34.
KAHN: See my Explanation of Abstention on Comment 16-34.

16-644 Log #2755 NEC-P16 **Final Action: Reject**
(800.53(A))

Submitter: Richard Fransen, Daikin America, Inc. / Rep. Cable Fire Research Association
Comment on Proposal No: 16-145
Recommendation: Continue to accept this proposal in principle.
Substantiation: CFRA agrees with the panel action.
Panel Meeting Action: Reject
Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:

"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."

This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.

Number Eligible to Vote: 15
Ballot Results: Affirmative: 13 Abstain: 2
Comment on Affirmative:
OHDE: See my Affirmative Comment for Comment 16-34.
Explanation of Abstention:
DORNA: See my Explanation of Abstention for Comment 16-34.
KAHN: See my Explanation of Abstention on Comment 16-34.

16-645 Log #2518zzz NEC-P16 **Final Action: Accept**
(800.53(A))

Note: See the Technical Correlating Committee Note on Comment 16-452.
Submitter: Vince Baclawski, National Electrical Manufacturers Association (NEMA)
Comment on Proposal No: 16-144
Recommendation: Reject this proposal.
Substantiation: See our companion comment on Proposal 1-69.
Panel Meeting Action: Accept
Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:

"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."

This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.

Number Eligible to Vote: 15
Ballot Results: Affirmative: 13 Abstain: 2
Comment on Affirmative:
OHDE: See my Affirmative Comment for Comment 16-34.
Explanation of Abstention:
DORNA: See my Explanation of Abstention for Comment 16-34.
KAHN: See my Explanation of Abstention on Comment 16-34.

16-646 Log #2518mmmm NEC-P16 **Final Action: Accept**
(800.53(A))

Note: See the Technical Correlating Committee Note on Comment 16-452.
Submitter: Vince Baclawski, National Electrical Manufacturers Association (NEMA)
Comment on Proposal No: 16-143
Recommendation: Reject this proposal.
Substantiation: See our companion comment on Proposal 1-69.
Panel Meeting Action: Accept
Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:

"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."

This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.

Number Eligible to Vote: 15
Ballot Results: Affirmative: 13 Abstain: 2
Comment on Affirmative:
OHDE: See my Affirmative Comment for Comment 16-34.
Explanation of Abstention:
DORNA: See my Explanation of Abstention for Comment 16-34.
KAHN: See my Explanation of Abstention on Comment 16-34.

16-647 Log #3148 NEC-P16 **Final Action: Accept**
(800.53(A))

Note: See the Technical Correlating Committee Note on Comment 16-452.
Submitter: Michael I. Callanan, IBEW
Comment on Proposal No: 16-142a
Recommendation: Reject this proposal.
Substantiation: This proposal should be rejected as we agree with the explanation of negative of Mr. Jones and Mr. Ohde. This comment represents the official position of the International Brotherhood of Electrical Workers Codes and Standards Committee.
Panel Meeting Action: Accept
Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:

"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."

This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.

Number Eligible to Vote: 15
Ballot Results: Affirmative: 13 Abstain: 2
Comment on Affirmative:
OHDE: See my Affirmative Comment for Comment 16-34.
Explanation of Abstention:
DORNA: See my Explanation of Abstention for Comment 16-34.
KAHN: See my Explanation of Abstention on Comment 16-34.

16-648 Log #3149 NEC-P16 **Final Action: Accept**
(800.53(A))

Note: See the Technical Correlating Committee Note on Comment 16-452.
Submitter: Michael I. Callanan, IBEW
Comment on Proposal No: 16-143
Recommendation: Reject this proposal.
Substantiation: This proposal should be rejected as we agree with the explanation of negative of Mr. Jensen, Mr. Jones and Mr. Ohde. This comment represents the official position of the International Brotherhood of Electrical Workers Codes and Standards Committee.
Panel Meeting Action: Accept
Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:

"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."

This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.

Number Eligible to Vote: 15
Ballot Results: Affirmative: 13 Abstain: 2
Comment on Affirmative:
OHDE: See my Affirmative Comment for Comment 16-34.
Explanation of Abstention:
DORNA: See my Explanation of Abstention for Comment 16-34.
KAHN: See my Explanation of Abstention on Comment 16-34.

16-649 Log #3150 NEC-P16 **Final Action: Accept**
(800.53(A))

Note: See the Technical Correlating Committee Note on Comment 16-452.
Submitter: Michael I. Callanan, IBEW
Comment on Proposal No: 16-144
Recommendation: Reject this proposal.
Substantiation: This proposal should be rejected as we agree with the explanation of negative of Mr. Jensen, Mr. Jones and Mr. Ohde. This comment represents the official position of the International Brotherhood of Electrical Workers Codes and Standards Committee.
Panel Meeting Action: Accept
Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:

"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."

This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.

Number Eligible to Vote: 15
Ballot Results: Affirmative: 13 Abstain: 2
Comment on Affirmative:
OHDE: See my Affirmative Comment for Comment 16-34.
Explanation of Abstention:
DORNA: See my Explanation of Abstention for Comment 16-34.
KAHN: See my Explanation of Abstention on Comment 16-34.

16-650 Log #3151 NEC-P16 **Final Action: Accept**
(800.53(A))

Note: See the Technical Correlating Committee Note on Comment 16-452.
Submitter: Michael I. Callanan, IBEW
Comment on Proposal No: 16-145
Recommendation: Reject this proposal.
Substantiation: This proposal should be rejected as we agree with the explanation of negative of Mr. Jensen, Mr. Jones and Mr. Ohde. This comment represents the official position of the International Brotherhood of Electrical Workers Codes and Standards Committee.
Panel Meeting Action: Accept

Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:

"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."

This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.

Number Eligible to Vote: 15
Ballot Results: Affirmative: 13 Abstain: 2
Comment on Affirmative:
OHDE: See my Affirmative Comment for Comment 16-34.
Explanation of Abstention:
DORNA: See my Explanation of Abstention for Comment 16-34.
KAHN: See my Explanation of Abstention on Comment 16-34.

16-651 Log #3871 NEC-P16 **Final Action: Reject**
(800.53(A), 800.53(B)(1))

Submitter: Marcelo M. Hirschler, GBH International / Rep. Fire Retardant Chemicals Association
Comment on Proposal No: 16-112
Recommendation: *There is no consistency in the NEC on the removal of abandoned cables. This is primarily an issue with cables in Articles 645, 725, 760, 770, 800, 820 and 830. The wording should be as follows consistently: "Abandoned [cable type] cables shall be removed." It should also be contained in the section on applications of cables.*

800.53 Applications of Listed Communications Wires and Cables and Communications Raceways. Communications wires and cables shall comply with the requirements of 800.53(A) through (F) or where cable substitutions are made in accordance with 800.53(G).

(A) Plenum. Cables installed in ducts, plenums, and other spaces used for environmental air shall be Type CMP. Abandoned cables shall be removed. Types CMP, CMR, CMG, CM, and CMX and communications wire installed in compliance with 300.22 shall be permitted. Listed plenum communications raceways shall be permitted to be installed in ducts and plenums as described in 300.22(B) and in other spaces used for environmental air as described in 300.22(C). Only Type CMP cable shall be permitted to be installed in these raceways.

(B) Riser. Cables installed in risers shall comply with 800.53(B)(1), (B)(2), or (B)(3).

(1) Cables in Vertical Runs. Cables installed in vertical runs and penetrating more than one floor, or cables installed in vertical runs in a shaft, shall be Type CMR. Floor penetrations requiring Type CMR shall contain only cables suitable for riser or plenum use. Abandoned cables shall be removed. Listed riser communications raceways shall be permitted to be installed in vertical riser runs in a shaft from floor to floor. Only Type CMR and CMP cables shall be permitted to be installed in these raceways.

Substantiation: The issue here is the interpretation of the action required with respect to what is accessible. The issue of "accessible" cables creates confusion that makes the enforcement of the removal of abandoned cable "dicey" because it is unclear what "accessible" means. The NEC defines the following terms in Article 100:

Accessible (as applied to equipment). Admitting close approach; not guarded by locked doors, elevation, or other effective means.

Accessible (as applied to wiring methods). Capable of being removed or exposed without damaging the building structure or finish or not permanently closed in by the structure or finish of the building.

Accessible, Readily (Readily Accessible). Capable of being reached quickly for operation, renewal, or inspections without requiring those to whom ready access is requisite to climb over or remove obstacles or to resort to portable ladders, and so forth.

The phrase "the accessible portion of abandoned cables" is much vaguer than the definitions in the code, because the term "accessible portion" is not defined. Therefore, accessible portion is probably considered that length of cable that is within a few feet of the opening, and that can be cut off by reaching in. That is clearly not the intent of the code provision: the entire length of cable that can be pulled out should be removed.

Another possible interpretation is that this refers to excluding from removal those cables installed in the areas that CMP 16 calls "inaccessible ceiling cavity plenums and inaccessible raised floor plenums". The concept of those "inaccessible areas" was rejected by CMP 3 as inappropriate because there is no known fire safety problem with the present type of wiring methods, but it was approved by CMP 16. If this concept is approved, and the wording of "abandoned cables" includes the "accessible portion" concept, it would clearly mean that the NEC would permit some cables to be left permanently in place once abandoned. This was soundly rejected by the membership several times, in a concept upheld by Standards Council.

It is pretty obvious that the concept of removal of abandoned cable is not one where someone should try to tear down a building or cause structural damage to it just to remove cables "permanently closed in by the structure or finish of the building". I believe that we must trust in the intelligence of our code officials and electrical inspectors that they will not demand such actions. If there is a feeling that this is a possibility (which I cannot believe), it might be worth adding a Fine Print Note to the effect that removal of abandoned cables should not cause structural damage to the building. An example follows:

FPN: Removal of abandoned cables is not intended to cause structural damage to buildings.

Clearly, "the accessible portion of abandoned cables" is a misleading phrase which can lead to abundant misinterpretation. It should be eliminated in favor of the simpler "abandoned cables".

Panel Meeting Action: Reject
Panel Statement: See CMP 16 action and statement on Comment 16-310.
Number Eligible to Vote: 15
Ballot Results: Affirmative: 14 Negative: 1
Explanation of Negative:
OHDE: See my Explanation of Negative vote on Comment 16-654.

16-652 Log #3877 NEC-P16 **Final Action: Reject**
(800.53(A), 800.53(B)(1))

Submitter: Marcelo M. Hirschler, GBH International / Rep. Fire Retardant Chemicals Association
Comment on Proposal No: 16-141
Recommendation: *There is no consistency in the NEC on the removal of abandoned cables. This is primarily an issue with cables in Articles 645, 725, 760, 770, 800, 820 and 830. The wording should be as follows consistently: "Abandoned [cable type] cables shall be removed." It should also be contained in the section on applications of cables.*

800.53 Applications of Listed Communications Wires and Cables and Communications Raceways. Communications wires and cables shall comply with the requirements of 800.53(A) through (F) or where cable substitutions are made in accordance with 800.53(G).

(A) Plenum. Cables installed in ducts, plenums, and other spaces used for environmental air shall be Type CMP. Abandoned cables shall be removed. Types CMP, CMR, CMG, CM, and CMX and communications wire installed in compliance with 300.22 shall be permitted. Listed plenum communications raceways shall be permitted to be installed in ducts and plenums as described in 300.22(B) and in other spaces used for environmental air as described in 300.22(C). Only Type CMP cable shall be permitted to be installed in these raceways.

(B) Riser. Cables installed in risers shall comply with 800.53(B)(1), (B)(2), or (B)(3).

(1) Cables in Vertical Runs. Cables installed in vertical runs and penetrating more than one floor, or cables installed in vertical runs in a shaft, shall be Type CMR. Floor penetrations requiring Type CMR shall contain only cables suitable for riser or plenum use. Abandoned cables shall be removed. Listed riser communications raceways shall be permitted to be installed in vertical riser runs in a shaft from floor to floor. Only Type CMR and CMP cables shall be permitted to be installed in these raceways.

Substantiation: The issue here is the interpretation of the action required with respect to what is accessible. The issue of "accessible" cables creates confusion that makes the enforcement of the removal of abandoned cable "dicey" because it is unclear what "accessible" means. The NEC defines the following terms in Article 100:

Accessible (as applied to equipment). Admitting close approach; not guarded by locked doors, elevation, or other effective means.

Accessible (as applied to wiring methods). Capable of being removed or exposed without damaging the building structure or finish or not permanently closed in by the structure or finish of the building.

Accessible, Readily (Readily Accessible). Capable of being reached quickly for operation, renewal, or inspections without requiring those to whom ready access is requisite to climb over or remove obstacles or to resort to portable ladders, and so forth.

The phrase "the accessible portion of abandoned cables" is much vaguer than the definitions in the code, because the term "accessible portion" is not defined. Therefore, accessible portion is probably considered that length of cable that is within a few feet of the opening, and that can be cut off by reaching in. That is clearly not the intent of the code provision: the entire length of cable that can be pulled out should be removed.

Another possible interpretation is that this refers to excluding from removal those cables installed in the areas that CMP 16 calls "inaccessible ceiling cavity plenums and inaccessible raised floor plenums". The concept of those "inaccessible areas" was rejected by CMP 3 as inappropriate because there is no known fire safety problem with the present type of wiring methods, but it was approved by CMP 16. If this concept is approved, and the wording of

"abandoned cables" includes the "accessible portion" concept, it would clearly mean that the NEC would permit some cables to be left permanently in place once abandoned. This was soundly rejected by the membership several times, in a concept upheld by Standards Council.

It is pretty obvious that the concept of removal of abandoned cable is not one where someone should try to tear down a building or cause structural damage to it just to remove cables "permanently closed in by the structure or finish of the building". I believe that we must trust in the intelligence of our code officials and electrical inspectors that they will not demand such actions. If there is a feeling that this is a possibility (which I cannot believe), it might be worth adding a Fine Print Note to the effect that removal of abandoned cables should not cause structural damage to the building. An example follows:

FPN: Removal of abandoned cables is not intended to cause structural damage to buildings.

Clearly, "the accessible portion of abandoned cables" is a misleading phrase which can lead to abundant misinterpretation. It should be eliminated in favor of the simpler "abandoned cables".

Panel Meeting Action: Reject

Panel Statement: See CMP 16 action and statement on Comment 16-310.

Number Eligible to Vote: 15

Ballot Results: Affirmative: 14 Negative: 1

Explanation of Negative:

OHDE: See my Explanation of Negative vote on Comment 16-654.

16-653 Log #3879 NEC-P16 **Final Action: Reject**
(800.53(A), 800.53(B)(1))

Submitter: Marcelo M. Hirschler, GBH International / Rep. Fire Retardant Chemicals Association

Comment on Proposal No: 16-142

Recommendation: *There is no consistency in the NEC on the removal of abandoned cables. This is primarily an issue with cables in Articles 645, 725, 760, 770, 800, 820 and 830. The wording should be as follows consistently: "Abandoned [cable type] cables shall be removed." It should also be contained in the section on applications of cables.*

800.53 Applications of Listed Communications Wires and Cables and Communications Raceways. Communications wires and cables shall comply with the requirements of 800.53(A) through (F) or where cable substitutions are made in accordance with 800.53(G).

(A) Plenum. Cables installed in ducts, plenums, and other spaces used for environmental air shall be Type CMP. Abandoned cables shall be removed. Types CMP, CMR, CMG, CM, and CMX and communications wire installed in compliance with 300.22 shall be permitted. Listed plenum communications raceways shall be permitted to be installed in ducts and plenums as described in 300.22(B) and in other spaces used for environmental air as described in 300.22(C). Only Type CMP cable shall be permitted to be installed in these raceways.

(B) Riser. Cables installed in risers shall comply with 800.53(B)(1), (B)(2), or (B)(3).

(1) Cables in Vertical Runs. Cables installed in vertical runs and penetrating more than one floor, or cables installed in vertical runs in a shaft, shall be Type CMR. Floor penetrations requiring Type CMR shall contain only cables suitable for riser or plenum use. Abandoned cables shall be removed. Listed riser communications raceways shall be permitted to be installed in vertical riser runs in a shaft from floor to floor. Only Type CMR and CMP cables shall be permitted to be installed in these raceways.

Substantiation: The issue here is the interpretation of the action required with respect to what is accessible. The issue of "accessible" cables creates confusion that makes the enforcement of the removal of abandoned cable "dicey" because it is unclear what "accessible" means. The NEC defines the following terms in Article 100:

Accessible (as applied to equipment). Admitting close approach; not guarded by locked doors, elevation, or other effective means.

Accessible (as applied to wiring methods). Capable of being removed or exposed without damaging the building structure or finish or not permanently closed in by the structure or finish of the building.

Accessible, Readily (Readily Accessible). Capable of being reached quickly for operation, renewal, or inspections without requiring those to whom ready access is requisite to climb over or remove obstacles or to resort to portable ladders, and so forth.

The phrase "the accessible portion of abandoned cables" is much vaguer than the definitions in the code, because the term "accessible portion" is not defined. Therefore, accessible portion is probably considered that length of cable that is within a few feet of the opening, and that can be cut off by reaching in. That is clearly not the intent of the code provision: the entire length of cable that can be pulled out should be removed.

Another possible interpretation is that this refers to excluding from removal those cables installed in the areas that CMP 16 calls "inaccessible ceiling cavity plenums and inaccessible raised floor plenums". The concept of those "inaccessible areas" was rejected by CMP 3 as inappropriate because there is no known fire safety problem with the present type of wiring methods, but it was approved by CMP 16. If this concept is approved, and the wording of "abandoned cables" includes the "accessible portion" concept, it would clearly mean that the NEC would permit some cables to be left permanently in place once abandoned. This was soundly rejected by the membership several times, in a concept upheld by Standards Council.

It is pretty obvious that the concept of removal of abandoned cable is not one where someone should try to tear down a building or cause structural damage to it just to remove cables "permanently closed in by the structure or finish of the building". I believe that we must trust in the intelligence of our code officials and electrical inspectors that they will not demand such actions. If there is a feeling that this is a possibility (which I cannot believe), it might be worth adding a Fine Print Note to the effect that removal of abandoned cables should not cause structural damage to the building. An example follows:

FPN: Removal of abandoned cables is not intended to cause structural damage to buildings.

Clearly, "the accessible portion of abandoned cables" is a misleading phrase which can lead to abundant misinterpretation. It should be eliminated in favor of the simpler "abandoned cables".

Panel Meeting Action: Reject

Panel Statement: See CMP 16 action and statement on Comment 16-654.

Number Eligible to Vote: 15

Ballot Results: Affirmative: 14 Negative: 1

Explanation of Negative:

OHDE: See my Explanation of Negative vote on Comment 16-654.

16-654 Log #3147 NEC-P16 **Final Action: Reject**
(800.53(A), 820.53(A) and 830.55(B))

Submitter: Michael I. Callanan, IBEW

Comment on Proposal No: 16-141

Recommendation: This proposal should be rejected and do not delete the sentence "Abandoned cables shall not be permitted to remain" in Sections 800.53(A), 820.53(A), and 830.55(B).

Substantiation: A review of the comments from the 2002 ROP/ROCs cited in proposal 16-141 above, specifically comments 2001 ROC 16-64 and 2001 ROC 16-87 and their panel actions do not indicate any errors on the part of the submitters. It was clear in reviewing the proposals, comments and panel actions that the intent was to remove abandoned cable not intended for future use. What is not clear is the introduction of the wording/phrase "The accessible portion of" abandoned (cable type) shall not be permitted to remain. The statement "Abandoned cables shall not be permitted to remain" in 800.53(A) and 820.53(A), and 830.55(B) is very clear; you shall remove the abandoned cables. The statement "The accessible portion of" abandoned (cable type) shall not be permitted to remain is not as clear. What is the interpretation of accessible portion? Does the definition of Accessible (as applied to wiring methods) in Article 100 applied to 800.3(A), 820.3(A), and 830.3(A) adequately require every effort be made to remove abandoned cable. To remove the statement "Abandoned cables shall not be permitted to remain" from 800.53(A), 820.53(A), and 830.55(B) leaves 800.3(A), 820.3(A), 820.3(A) and 830.3(A) wide open to interpretation as to what the accessible portion of abandoned cables is. To remove "Abandoned cables shall not be permitted to remain" should require a rewrite of 800.3(A), 820.3(A), and 830.3(A) to better clarify what is meant by "The accessible portion of abandoned cables" and perhaps an update to the definition of Accessible. The necessary text in 800.3(A), 820.3(A), and 830.3(A) is not in place to address what is meant by accessible portion of abandoned cable.

There is not technical substantiation to leave the non-accessible portion of the abandoned cable in plenums and riser areas and therefore should not be allowed to remain. Every effort should be made to remove abandoned cables.

This comment represents the official position of the International Brotherhood of Electrical Workers Codes and Standards Committee.

Panel Meeting Action: Reject

Panel Statement: CMP 16's intent is to require the removal of "the accessible portion" of the abandoned optical fiber/communications/coaxial/ network-powered broadband communications cable and to state this requirement only once in each article.

It was never the intent of CMP 16 to require the dismantling of walls, ceilings, etc. to remove inaccessible portions of abandoned cable.

The submitter's intent was accomplished by stating the requirement only once in the proposed 2005 NEC in 770.3, 800.3, 820.3, and 830.3. Therefore, the phrase "abandoned cable shall not be permitted to remain", was removed from 770.53, 800.53, 820.53, and 830.55.

The definition of "Accessible (as applied to wiring methods)" in Article 100 applies.

Number Eligible to Vote: 15

Ballot Results: Affirmative: 14 Negative: 1

Explanation of Negative:

OHDE: I am voting negative on both the panel action and panel statement. The panel statement did not satisfy nor justify the rejection of the submitter's recommendation. The submitter intent was not accomplished by stating the requirement only once in the proposed 2005 NEC Section 800.3, 820.3 and 830.3. Sections 800.53(A) and (B), 820.53(A) and (B), 830.55(B) and (C) refer to plenum and riser areas and there was no technical substantiation to leave the non-accessible portion of the abandoned cable to remain in these areas. Every effort should be made to remove abandoned cable.

16-655 Log #2920 NEC-P16 **Final Action: Reject**
(800.54 (New))

Submitter: David H. Kendall, Carlon
Comment on Proposal No: 16-147
Recommendation: This proposal should review and reconsidered with the following text:
800.54 Communication Device and Equipment Mounting . Communication devices or equipment shall be mounted in listed boxes, brackets or assemblies designed for the purpose, and such boxes, brackets or assemblies shall be securely fastened in place.
Substantiation: Devices used with Communication cable should be mounted on other means than just the dry wall. Yes, there will be additional cost due to labor and material, but the boxes will supply the necessary fixed mounting for the device and cable. This is an individual opinion developed through conversations with BICSI, IBEW, IAEI and NECA members who have approached me with these concerns. UL has also developed listing requirements for these boxes and brackets.
The panel statement is evidence that it is acceptable to mount these devices directly to the dry wall without any other means of securing the device and needs to be reconsidered.
Panel Meeting Action: Reject
Panel Statement: The submitter has not substantiated that a safety hazard exists. The use of boxes is not always required. The listing of equipment enclosures (boxes) will not, in itself, guarantee a safe and professional installation.
Secure fastening is a workmanship issue and is covered in 800.6.
The same quality of workmanship is necessary, whether or not the enclosure is listed.
It is long-standing practice in the communication industry to mount connecting blocks on walls and backboards without a box or enclosure. The proposed wording would preclude the installation of RJ-11 connection blocks on residential baseboards, which is industry practice.
Number Eligible to Vote: 15
Ballot Results: Affirmative: 15

ARTICLE 820 — COMMUNITY ANTENNA TELEVISION AND RADIO DISTRIBUTION SYSTEMS

16-656 Log #3828 NEC-P16 **Final Action: Accept**
(820.2)

Submitter: Marcelo M. Hirschler, GBH International / Rep. Fire Retardant Chemicals Association
Comment on Proposal No: 16-9
Recommendation: *Reject the definitions of the various types of plenum contained within this proposal.*
Substantiation: * There is no need for these definitions in the NEC. These definitions are not contained in NFPA 90A, but, more importantly, are not needed in the NEC. Acceptance of proposals using these terms exclusively by CMP 16 is not enough justification, in view of the rejection of proposals using these terms by CMP 3 in Articles 300, 725 and 760, to put the terms into the NEC.
* This comment recommends rejection of a subdivision of "other spaces used for environmental air" and rejection of granting priority to NFPA 90A on choices of wiring methods.
* The input from CMP 3 and from the NEC Technical Coordinating Committee makes it clear that the terminology used in 300.22 has served the NEC well and needs no change. It has also become clear now that the expertise needed for choosing the type of wiring systems permitted in any space should be the prerogative of the NEC, which (through its various panels and its Technical Correlating Committee) has greater expertise and a broader view than the Technical Committee on Air Conditioning (responsible for NFPA 90A). Therefore, the NEC panels should continue making their own choices regarding wiring methods.
* It has already been shown in detail by the fire hazard and fire risk analysis presented together with my original proposals (see for example the section on pages 2080-2091 of the NEC-ROP of the substantiation for my proposal 3-130) that there is no need to change the requirements, or limit the application, for wiring methods in plenums, because the fire safety record is excellent.
* The definition of "air duct" is unnecessary in Articles 770, 800 and 820, as it has been adopted as a general NEC definition by CMP 1 in Article 100.
* I understand that this comment represents a change in some of the concepts the submitter believed when the proposal was submitted, but "even old dogs can learn".
Panel Meeting Action: Accept
Panel Statement: See panel action and statement on Comment 16-79.
Number Eligible to Vote: 15
Ballot Results: Affirmative: 15
Comment on Affirmative:
OHDE: See my Affirmative Comment for Comment 16-16.

16-657 Log #272 NEC-P16 **Final Action: Accept**
(820.3)

Submitter: Technical Committee on Air Conditioning
Comment on Proposal No: 16-156
Recommendation: Continue to reject this proposal.
Substantiation: The Technical Committee on Air Conditioning agrees with the panel statement.
This comment is one in a series of comments including 16-12, 16-40, 16-60, 16-83, 16-115, 16-132, 16-138, 16-156, 16-180, 16-188, 16-195, 16-207, 16-209, 16-211, 16-228, 16-229, and 16-234.
Panel Meeting Action: Accept
Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:
"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."
This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.
Number Eligible to Vote: 15
Ballot Results: Affirmative: 13 Abstain: 2
Comment on Affirmative:
OHDE: See my Affirmative Comment for Comment 16-34.
Explanation of Abstention:
DORNA: See my Explanation of Abstention for Comment 16-34.
KAHN: See my Explanation of Abstention on Comment 16-34.

16-658 Log #1773 NEC-P16 **Final Action: Accept**
(820.3)

Submitter: Richard P. Owen, City of St. Paul, Minnesota
Comment on Proposal No: 16-156
Recommendation: Continue to reject this proposal.
Substantiation: The Panel 3/Panel 16 Task Group, appointed by the NEC TCC, developed this comment.
The task group agrees with Panel 16's action and statement.
By accepting the majority of the suggested changes in a submitted comment for Proposal 3-94, "Other Spaces for Environmental Air" has been further subdivided into two separate spaces, ceiling cavity and raised floor plenums but the Panel still has maintained the electrical industry terminology associated with these spaces. Providing this further subdivision will enhance the usability of the NEC by making it easier to determine what other spaces are being referenced in this section. It will also improve correlation between the NEC and NFPA 90A.
The following members of Panels 3 and 16 participated in this Task Group assignment: From Panel 3, Mr. Sanford E. Egesdal representing the Automatic Fire Alarm Association, Inc., Mr. Ronald E. Maassen representing the National Electrical Contractors Association, and Mr. Mark C. Ode representing Underwriters Laboratories Inc. From Panel 16, Mr. Robert W. Jensen representing the Building Industry Consulting Services International, Mr. Harold C. Ohde representing the International Brotherhood of Electrical Workers, and Mr. Joseph W. Rao representing the Independent Electrical Contractors, Inc. Mr. Richard P. Owen, the Chairman of CMP 3, representing the International Association of Electrical Inspectors, was the chairman of the Task Group.
Panel Meeting Action: Accept
Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:
"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."
This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.
Number Eligible to Vote: 15
Ballot Results: Affirmative: 13 Abstain: 2

Comment on Affirmative:
OHDE: See my Affirmative Comment for Comment 16-34.
Explanation of Abstention:
DORNA: See my Explanation of Abstention for Comment 16-34.
KAHN: See my Explanation of Abstention on Comment 16-34.

16-659 Log #2756 NEC-P16 **Final Action: Accept**
(820.3)

Submitter: Richard Fransen, Daikin America, Inc. / Rep. Cable Fire Research Association
Comment on Proposal No: 16-156
Recommendation: Continue to reject this proposal.
Substantiation: CFRA agrees with the panel action.
Panel Meeting Action: Accept
Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:
"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."
This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.
Number Eligible to Vote: 15
Ballot Results: Affirmative: 13 Abstain: 2
Comment on Affirmative:
OHDE: See my Affirmative Comment for Comment 16-34.
Explanation of Abstention:
DORNA: See my Explanation of Abstention for Comment 16-34.
KAHN: See my Explanation of Abstention on Comment 16-34.

16-660 Log #3152 NEC-P16 **Final Action: Accept**
(820.3)

Submitter: Michael I. Callanan, IBEW
Comment on Proposal No: 16-156
Recommendation: Continue to reject.
Substantiation: I agree with the panel action to reject proposal 16-156. No technical substantiation has been provided that a change to the 2002 NEC language is needed or required. This comment represents the official position of the International Brotherhood of Electrical Workers Codes and Standards Committee.
Panel Meeting Action: Accept
Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:
"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."
This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.
Number Eligible to Vote: 15
Ballot Results: Affirmative: 13 Abstain: 2
Comment on Affirmative:
OHDE: See my Affirmative Comment for Comment 16-34.
Explanation of Abstention:
DORNA: See my Explanation of Abstention for Comment 16-34.
KAHN: See my Explanation of Abstention on Comment 16-34.

16-661 Log #3854 NEC-P16 **Final Action: Reject**
(820.3)

Submitter: Marcelo M. Hirschler, GBH International / Rep. Fire Retardant Chemicals Association
Comment on Proposal No: 16-156
Recommendation: Revise to read as follows:
820.3 Locations and Other Articles. Circuits and equipment shall comply with 820.3(A) through (G).
(A) Spread of Fire or Products of Combustion. Section 300.21 shall apply. The accessible portion of abandoned coaxial cables shall not be permitted to remain.
(B) Ducts, Plenums, and Other Air-Handling Spaces. Section 300.22, where installed in ducts or plenums or other spaces used for environmental air, shall apply. Wiring methods installed in spaces covered by Section 300.22 (C) shall be permitted to extend not more than 150 mm (6 in.) beyond the limits of the space into a space covered by section 300.22 (B). Wiring methods installed in spaces covered by Section 300.22 (C) shall also be permitted to extend not more than 150 mm (6 in.) into inaccessible spaces covered by section 300.22 (C).
Exception: As permitted in 820.53(A).
No changes proposed to 820.3 (C) through 820.3 (G).
Do not make any other changes to section 820.3, including restrictions in the use of plenum cables.
Substantiation: This comment has two main objectives: (1) improving on the original proposal, which had as its primary intent to make it clear that wiring systems should be permitted to extend up to 6 inches into a more restrictive environment, without developing any limitations for their use in less restrictive environments and (2) recommending no change in the applications of the wiring methods to be used in ducts, plenums and other air-handling spaces.
Explanation:
* It is important that installers of wiring in plenums and other spaces used for environmental air be able to complete installations without having to change wiring methods in order to terminate their installation just outside the plenum area, because that will help them and prevent unwarranted increases in wiring installation costs. There are multiple examples in the NEC where materials are permitted to extend slightly beyond the original space, including the following: 110.26 (3), 210.52 (5) Exception, 300.50 (A) Exceptions 2 and 3, 426.22 (b), 520.42, 550.13 (G) (3), and Table 830.12. Moreover, the concept of using 6 inches as a small distance is used over 30 times in the NEC.
* This comment recognizes that CMP 16 has introduced a new concept: "inaccessible areas" of plenum spaces (or of "other spaces used for environmental air") with the intention of prohibiting some 300.22 (C) wiring methods from being used in those areas. That concept has not been approved by CMP 3 and I support that rejection. However if continued to be accepted by CMP 16 and then approved by the membership and by Standards Council, the revised articles 770, 800, 820 and 830 in NEC-2005 would contain the concept of "inaccessible areas" and create confusion by forcing some users to keep changing wiring methods as they work their way through plenums. Acceptance of this comment would solve that problem. Of course, even if the concept of "inaccessible"areas of plenum spaces is ultimately rejected (as I feel it should), that part of this comment could then still be a useful clarification or could be eliminated after the fact by the membership, the NEC Technical Correlating Committee or Standards Council.
* This comment recommends continued rejection of a subdivision of "other spaces used for environmental air" and continued rejection of granting priority to NFPA 90A on choices of wiring methods.
* The input from CMP 3 and from the NEC Technical Coordinating Committee makes it clear that the terminology used in 300.22 has served the NEC well and needs no change. It has also become clear now that the expertise needed for choosing the type of wiring systems permitted in any space should be the prerogative of the NEC, which (through its various panels and its Technical Correlating Committee) has greater expertise and a broader view than the Technical Committee on Air Conditioning (responsible for NFPA 90A). Therefore, as a member of the Technical Committee on Air Conditioning, I believe the NEC panels should continue making their own choices regarding wiring methods.
* It has already been shown in detail by the fire hazard and fire risk analysis presented together with my original proposals (see for example the section on pages 2427-2431 of the NEC-ROP of the substantiation for this proposal of mine) that there is no need to change the requirements, or limit the application, for wiring methods in plenums, because the fire safety record is excellent.
This comment is one of a series of comments on Articles 300, 725, 760, 770, 800, 820 and 830, regarding "plenum cables". The philosophy behind all the comments is that the NEC is OK as published in 2002, but that 2 minor changes might represent improvements: (i) the clarification of the 6 inch extension of a wiring method into a more restricted environment and (ii) the clarification in the Fine Print Notes that a cable listed to NFPA 262 is listed both based on its "low-smoke" characteristics and its "low-flame-spread" characteristics, and that the two are not listed separately.
Also see comments from the chairman of the Technical Correlating Committee.
Panel Meeting Action: Reject
Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:

"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."

This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.

Number Eligible to Vote: 15

Ballot Results: Affirmative: 13 Abstain: 2

Comment on Affirmative:

OHDE: See my Affirmative Comment for Comment 16-34.

Explanation of Abstention:

DORNA: See my Explanation of Abstention for Comment 16-34.

KAHN: See my Explanation of Abstention on Comment 16-34.

16-662 Log #3873 NEC-P16 **Final Action: Reject**
(820.3(A))

Submitter: Marcelo M. Hirschler, GBH International / Rep. Fire Retardant Chemicals Association

Comment on Proposal No: 16-13

Recommendation: *There is no consistency in the NEC on the removal of abandoned cables. This is primarily an issue with cables in Articles 645, 725, 760, 770, 800, 820 and 830. The wording should be as follows consistently: "Abandoned [cable type] cables shall be removed." It should also be contained in the section on applications of cables.*

820.3 Locations and Other Articles. Circuits and equipment shall comply with 820.3(A) through (G).

(A) Spread of Fire or Products of Combustion. Section 300.21 shall apply. Abandoned ~~The accessible portion of abandoned~~ coaxial cables shall be removed.

FPN: Directories of electrical construction materials published by qualified testing laboratories contain many listing installation restrictions necessary to maintain the fire-resistive rating of assemblies where penetrations or openings are made.

Substantiation: The issue here is the interpretation of the action required with respect to what is accessible. The issue of "accessible" cables creates confusion that makes the enforcement of the removal of abandoned cable "dicey" because it is unclear what "accessible" means. The NEC defines the following terms in Article 100:

Accessible (as applied to equipment). Admitting close approach; not guarded by locked doors, elevation, or other effective means.

Accessible (as applied to wiring methods). Capable of being removed or exposed without damaging the building structure or finish or not permanently closed in by the structure or finish of the building.

Accessible, Readily (Readily Accessible). Capable of being reached quickly for operation, renewal, or inspections without requiring those to whom ready access is requisite to climb over or remove obstacles or to resort to portable ladders, and so forth.

The phrase "the accessible portion of abandoned cables" is much vaguer than the definitions in the code, because the term "accessible portion" is not defined. Therefore, accessible portion is probably considered that length of cable that is within a few feet of the opening, and that can be cut off by reaching in. That is clearly not the intent of the code provision: the entire length of cable that can be pulled out should be removed.

Another possible interpretation is that this refers to excluding from removal those cables installed in the areas that CMP 16 calls "inaccessible ceiling cavity plenums and inaccessible raised floor plenums". The concept of those "inaccessible areas" was rejected by CMP 3 as inappropriate because there is no known fire safety problem with the present type of wiring methods, but it was approved by CMP 16. If this concept is approved, and the wording of "abandoned cables" includes the "accessible portion" concept, it would clearly mean that the NEC would permit some cables to be left permanently in place once abandoned. This was soundly rejected by the membership several times, in a concept upheld by Standards Council.

It is pretty obvious that the concept of removal of abandoned cable is not one where someone should try to tear down a building or cause structural damage to it just to remove cables "permanently closed in by the structure or finish of the building". I believe that we must trust in the intelligence of our code officials and electrical inspectors that they will not demand such actions. If there is a feeling that this is a possibility (which I cannot believe), it might be worth adding a Fine Print Note to the effect that removal of abandoned cables should not cause structural damage to the building. An example follows:

FPN: Removal of abandoned cables is not intended to cause structural damage to buildings.

Clearly, "the accessible portion of abandoned cables" is a misleading phrase which can lead to abundant misinterpretation. It should be eliminated in favor of the simpler "abandoned cables".

Panel Meeting Action: Reject

Panel Statement: See CMP 16 action and statement on Comment 16-654.

Number Eligible to Vote: 15

Ballot Results: Affirmative: 14 Negative: 1

Explanation of Negative:

OHDE: I am voting negative on both the panel action and the panel statement. I agree with submitter's substantiation and the real issue here is the interpretation of the term "accessible" versus the phrase "The accessible portion of abandoned cable". The term "accessible portion" is vague and is not defined and should be as this wording can have many different interpretations. This would be very difficult to enforce because of the unclear meaning of this term. Article 100 does define the term "accessible" and these definitions are quite clear and concise in regards to their meaning and applcations. The panel statement for comments 16-310 and 16-654 state that definition of "Accessible(as applied to wiring methods)" in Article 100 applies. This definition does not have the same meaning or interpretation for the phrase "accessible portion." "The accessible portion of abandoned (type) cables shall not be permitted to remain" can be found in the proposed 2005 NEC in 770.3, 800.3, 820.3 and 830.3.

16-663 Log #1486 NEC-P16 **Final Action: Accept in Principle**
(820.3(B))

Submitter: Marcelo M. Hirschler, GBH International / Rep. Fire Retardant Chemicals

Comment on Proposal No: 16-15

Recommendation: Continue rejecting this proposal.

Substantiation: • This comment recommends rejection of a subdivision of "other spaces used for environmental air" and continued rejection of granting priority to NFPA 90A on choices of wiring methods.

• The input from CMP 3 and from the NEC Technical Coordinating Committee makes it clear that the terminology used in 300.22 has served the NEC well and needs no change. It has also become clear now that the expertise needed for choosing the type of wiring systems permitted in any space should be the prerogative of the NEC, which (through its various panels and its Technical Correlating Committee) has greater expertise and a broader view than the Technical Committee on Air Conditioning (responsible for NFPA 90A). Therefore, the NEC panels should continue making their own choices regarding wiring methods.

• It has already been shown in detail by the fire hazard and fire risk analysis presented together with my original proposals (see for example the section on pages 2080-2091 of the NEC-ROP of the substantiation for my proposal 3-130) that there is no need to change the requirements, or limit the application, for wiring methods in plenums, because the fire safety record is excellent.

• I understand that this comment represents a change in some of the concepts the submitter believed when the proposal was submitted, but "even old dogs can learn".

Panel Meeting Action: Accept in Principle

Panel Statement: See CMP 16 action on Comment 16-42.

Number Eligible to Vote: 15

Ballot Results: Affirmative: 15

16-664 Log #265 NEC-P16 **Final Action: Reject**
(820.5)

Submitter: Technical Committee on Air Conditioning

Comment on Proposal No: 16-209

Recommendation: Continue to accept this proposal in principle in part.

Substantiation: The Technical Committee on Air Conditioning agrees with the panel statement.

This comment is one in a series of comments including 16-12, 16-40, 16-60, 16-83, 16-115, 16-132, 16-138, 16-156, 16-180, 16-188, 16-195, 16-207, 16-209, 16-211, 16-228, 16-229, and 16-234.

Panel Meeting Action: Reject

Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:

"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."

This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.

Number Eligible to Vote: 15

Ballot Results: Affirmative: 13 Abstain: 2

Comment on Affirmative:

OHDE: See my Affirmative Comment for Comment 16-34.

Explanation of Abstention:

DORNA: See my Explanation of Abstention for Comment 16-34.

KAHN: See my Explanation of Abstention on Comment 16-34.

16-665 Log #2779 NEC-P16 **Final Action: Reject**
(820.5)

Submitter: L. Jeffrey Mattern, FM Global
Comment on Proposal No: 16-209
Recommendation: Continue to accept this proposal in principle in part.
Substantiation: CFRA agrees with the panel action.
Panel Meeting Action: Reject
Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:

"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."

This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.
Number Eligible to Vote: 15
Ballot Results: Affirmative: 13 Abstain: 2
Comment on Affirmative:
OHDE: See my Affirmative Comment for Comment 16-34.
Explanation of Abstention:
DORNA: See my Explanation of Abstention for Comment 16-34.
KAHN: See my Explanation of Abstention on Comment 16-34.

16-666 Log #3141 NEC-P16 **Final Action: Accept**
(820.5)

Submitter: Michael I. Callanan, IBEW
Comment on Proposal No: 16-158
Recommendation: Continue to reject.
Substantiation: We agree with both the panel action and the panel statement to reject proposal 16-158. This comment represents the official position of the International Brotherhood of Electrical Workers Codes and Standards Committee.
Panel Meeting Action: Accept
Number Eligible to Vote: 15
Ballot Results: Affirmative: 15

16-667 Log #951 NEC-P16 **Final Action: Reject**
(820.6)

Submitter: Dorothy Kellogg, American Chemistry Council
Comment on Proposal No: 16-160
Recommendation: The installation shall also conform with 300.4(D) ~~and 300.11~~.
Substantiation: The inclusion of Article into 820.6 introduces overly restrictive requirements. Panel 16 added the reference to 300.11, but did not furnish any technical support that a safety issue exists justifying the additional installation requirements of 300.11.
Panel Meeting Action: Reject
Panel Statement: Section 300.11 is appropriate for all cables regardless of whether the cable is an optical fiber cable, communications cable, coaxial cable, or network-powered broadband cable.
Number Eligible to Vote: 15
Ballot Results: Affirmative: 10 Negative: 5
Explanation of Negative:
BRUNSSEN: Comment 16-667 should be accepted. The securing and support requirements of 300.11 are overly restrictive and are inappropriate for CATV conductors. Section 300.11 is appropriate for power cable assemblies that are heavier and larger than CATV cables. A CATV cable used for premises wiring is typically less than one-quarter inch in diameter and operates at very low RF signal voltages. Modification of premises CATV circuits typically involves the installation of a single, or at most, a few additional cables. 300.11(C) does not permit cables to be used as a support. However, as a CATV system evolves, cables are often installed over an extended period of time and lashed together in a "cable assembly". It is overly restrictive to specify that each addition of a single CATV cable require installation of additional and separate supports. Such added requirements serve only to unnecessarily increase installation costs. The Panel has cited neither a safety hazard nor provided technical justification for the addition of the reference to 300.11. Note that the Panel acknowledges in the Panel Statement for comment 16-669 regarding the very same issue: "CMP 16 understands that the proposal as modified by the panel is not the original intent of the submitter. However, the panel sustains its action."
DORNA: I agree and support Mr. Brunssen's explanation on this comment.
HUGHES: This comment should have been accepted. Imposing the requiremnts of NEC 300.11 for this application will result in unnecessary supports being required by the Code. 300.11 is intended to apply to power wiring and not the cabling covered in the scope of this Article. JOHNSON: I agree with the submitter's substantiation in this comment. Compliance with Section 300.11 is overly restrictive for applications of coaxial cable installations. 300.11 is appropriate for power assemblies which are larger and heavier than coaxial cables. Coaxial cables are smaller in diameter and lighter weight. There is no justification to disallow supporting an additional coaxial cable by lashing it to an existing bundle of properly supported cables. Additional coaxial cables will not cause undue strain on the existing cable support system.
JONES: See my explanation of negative vote on Comment 16-70.
Comment on Affirmative:
OHDE: See my Affirmative Comment for Comment 16-70.

16-668 Log #3134 NEC-P16 **Final Action: Accept**
(820.6)

Submitter: Michael I. Callanan, IBEW
Comment on Proposal No: 16-160
Recommendation: This proposal should be continued to be accepted in principle.
Substantiation: We agree with both the panel action and the panel statement. 300-11 is appropriate for all cables regardless if the cable is a coaxial cable assembly or power cable assembly. The addition of the FPN is appropriate and a good reference for installing cables. This comment represents the official position of the International Brotherhood of Electrical Workers Codes and Standards Committee.
Panel Meeting Action: Accept
Number Eligible to Vote: 15
Ballot Results: Affirmative: 10 Negative: 5
Explanation of Negative:
BRUNSSEN: Comment 16-668 should be rejected, as well as the addition of the reference to 300.11 added by the Panel in Proposal 16-160. The securing and support requirements of 300.11 are overly restrictive and are inappropriate for CATV conductors. Section 300.11 is appropriate for power cable assemblies that are heavier and larger than CATV cables. A CATV cable used for premises wiring is typically less than one-quarter inch in diameter and operates at very low RF signal voltages. Modification of premises CATV circuits typically involves the installation of a single, or at most, a few additional cables. 300.11(C) does not permit cables to be used as a support. However, as a CATV system evolves, cables are often installed over an extended period of time and lashed together in a "cable assembly". It is overly restrictive to specify that each addition of a single CATV cable require installation of additional and separate supports. Such added requirements serve only to unnecessarily increase installation costs. The Panel has cited neither a safety hazard nor provided technical justification for the addition of the reference to 300.11. Note that the Panel acknowledges in the Panel Statement for comment 16-669 regarding the very same issue: "CMP 16 understands that the proposal as modified by the panel is not the original intent of the submitter. However, the panel sustains its action."
DORNA: I agree and support Mr. Brunssen's explanation on this comment.
HUGHES: This comment should have been accepted. Imposing the requiremnts of NEC 300.11 for this application will result in unnecessary supports being required by the Code. 300.11 is intended to apply to power wiring and not the cabling covered in the scope of this Article. JOHNSON: Compliance with Section 300.11 is overly restrictive for applications of coaxial cable installations. 300.11 is appropriate for power assemblies which are larger and heavier than coaxial cables. Coaxial cables are smaller in diameter and lighter weight. There is no justification to disallow supporting an additional coaxial cable by lashing it to an existing bundle of properly supported cables. Additional coaxial cables will not cause undue strain on the existing cable support system.
JONES: See my explanation of negative vote on Comment 16-70.**Comment on Affirmative:**
OHDE: See my Affirmative Comment for Comment 16-70.

16-669 Log #1198 NEC-P16 **Final Action: Reject**
(820.6(new 820-8))

Submitter: James E. Brunssen, Telcordia Technologies, Inc.
Comment on Proposal No: 16-160
Recommendation: Revise text to read as follows:

In the final sentence of the CMP 16 rewrite of 820.6, delete the text "and 300.11" as follows: "The installation shall also conform with 300.4(D) ~~and 300.11~~."

Substantiation: The requirement added by CMP 16 that the installation conform to 300.11 is overly restrictive and is inappropriate for coaxial CATV cables. 300.11 is appropriate for power cable assemblies that are heavier and

larger than coaxial CATV cables. A coaxial CATV cable used for premises wiring is typically less than one-quarter inch in diameter and carries no power. Modifications typically involve the installation of a single, or at most, a few additional coaxial cables. 300.11(C) does not permit cables to be used as a support. However, as a CATV system evolves, coaxial cables are often installed over an extended period of time and lashed together in a "cable assembly". It is overly restrictive to specify that each addition of a single coaxial cable require installation of additional and separate supports. Further, the panel did not provide substantiation for the addition of the reference to 300.11, and as the submitter of the original proposal, the addition of the reference to 300.11 does not meet my intent.

Panel Meeting Action: Reject

Panel Statement: CMP 16 understands that the proposal as modified by the panel is not the original intent of the submitter. However, the panel sustains its action.

Section 300.11 is appropriate for all cables regardless of whether the cable is an optical fiber cable, communications cable, coaxial cable, or network-powered broadband cable.

Number Eligible to Vote: 15

Ballot Results: Affirmative: 10 Negative: 5

Explanation of Negative:

BRUNSSEN: Comment 16-669 should be accepted. The securing and support requirements of 300.11 are overly restrictive and are inappropriate for CATV conductors. Section 300.11 is appropriate for power cable assemblies that are heavier and larger than CATV cables. A CATV cable used for premises wiring is typically less than one-quarter inch in diameter and operates at very low RF signal voltages. Modification of premises CATV circuits typically involves the installation of a single, or at most, a few additional cables. 300.11(C) does not permit cables to be used as a support. However, as a CATV system evolves, cables are often installed over an extended period of time and lashed together in a "cable assembly". It is overly restrictive to specify that each addition of a single CATV cable require installation of additional and separate supports. Such added requirements serve only to unnecessarily increase installation costs. The Panel has cited neither a safety hazard nor provided technical justification for the addition of the reference to 300.11. Note that the Panel acknowledges in the Panel Statement: "CMP 16 understands that the proposal as modified by the panel is not the original intent of the submitter. However, the panel sustains its action."

DORNA: I agree and support Mr. Brunssen's explanation on this comment.

HUGHES: This comment should have been accepted. Imposing the requiremnts of NEC 300.11 for this application will result in unnecessary supports being required by the Code. 300.11 is intended to apply to power wiring and not the cabling covered in the scope of this Article. JOHNSON: I agree with Mr. Brunssen's substantiation in this comment. Compliance with Section 300.11 is overly restrictive for applications of coaxial cable installations. 300.11 is appropriate for power assemblies which are larger and heavier than coaxial cables. Coaxial cables are smaller in diameter and lighter weight. There is no justification to disallow supporting an additional coaxial cable by lashing it to an existing bundle of properly supported cables. Additional coaxial cables will not cause undue strain on the existing cable support system.

JONES: See my explanation of negative vote on Comment 16-70.

Comment on Affirmative:

OHDE: See my Affirmative Comment for Comment 16-70.

16-670 Log #2155 NEC-P16 **Final Action: Accept in Principle in Part**
(820.8)

Submitter: Robert W. Jensen, dbi-Telecommunications

Comment on Proposal No: 16-160

Recommendation: Continue to accept this proposal in principle.

Delete text as follows:

Delete "and 300.11" from the last sentence.

Substantiation: Reference to 300.11 is inappropriate for CATV cables. These cables do not have to be "securely fastened in place" in order to have a safe installation.

Panel Meeting Action: Accept in Principle in Part

CMP 16 accepts that part of the comment that is to accept the proposal in principle.

CMP 16 rejects the deletion of "and 300.11".

Panel Statement: Section 300.11 is appropriate for all cables, regardless of whether the cable is an optical fiber cable, communications cable, coaxial cable, or network-powered broadband cable.

Number Eligible to Vote: 15

Ballot Results: Affirmative: 10 Negative: 5

Explanation of Negative:

BRUNSSEN: Comment 16-670 should be accepted. The securing and support requirements of 300.11 are overly restrictive and are inappropriate for CATV conductors. Section 300.11 is appropriate for power cable assemblies that are heavier and larger than CATV cables. A CATV cable used for premises wiring is typically less than one-quarter inch in diameter and operates at very low RF signal voltages. Modification of premises CATV circuits typically involves the installation of a single, or at most, a few additional cables. 300.11(C) does not permit cables to be used as a support. However, as a CATV system evolves, cables are often installed over an extended period of time and lashed together in a "cable assembly". It is overly restrictive to specify that each addition of a single CATV cable require installation of additional and separate supports. Such added requirements serve only to unnecessarily increase installation costs. The Panel has cited neither a safety hazard nor provided technical justification for the addition of the reference to 300.11. Note that the Panel acknowledges in the Panel Statement for comment 16-669 regarding the very same issue: "CMP 16 understands that the proposal as modified by the panel is not the original intent of the submitter. However, the panel sustains its action."

DORNA: I agree and support Mr. Brunssen's explanation on this comment.

HUGHES: This comment should have been accepted. Imposing the requiremnts of NEC 300.11 for this application will result in unnecessary supports being required by the Code. 300.11 is intended to apply to power wiring and not the cabling covered in the scope of this Article. JOHNSON: Compliance with Section 300.11 is overly restrictive for applications of coaxial cable installations. 300.11 is appropriate for power assemblies which are larger and heavier than coaxial cables. Coaxial cables are smaller in diameter and lighter weight. There is no justification to disallow supporting an additional coaxial cable by lashing it to an existing bundle of properly supported cables. Additional coaxial cables will not cause undue strain on the existing cable support system.

JONES: See my explanation of negative vote on Comment 16-70.

Comment on Affirmative:

OHDE: See my Affirmative Comment for Comment 16-70.

16-671 Log #668 NEC-P16 **Final Action: Accept**
(820.11(A) (New))

Submitter: Charles M. Trout, Maron Electric Co. Inc.

Comment on Proposal No: 16-86

Recommendation: This proposal should be accepted.

Substantiation: The term "handlhole enclosure" will be used in 314.15, Exception; 300.15(L); 314.29; and 314.1 based on the unanimous acceptance of Proposals 9-15; 9-18; 9-23; 9-68 and 3-78.

Panel Meeting Action: Accept

Number Eligible to Vote: 15

Ballot Results: Affirmative: 15

16-672 Log #3 NEC-P16 **Final Action: Reject**
(820.40(A)(4))

Submitter: Steven C. Johnson, Time Warner Cable / Rep. National Cable Telecommunications Association

Comment on Proposal No: 16-163

Recommendation: Delete the following proposed FPN:

"FPN: Similar grounding conductor length limitations applied at apartment buildings and commercial buildings will help to reduce voltages that may be developed between the building's power and communications systems during lightning events."

Substantiation: My NO vote and comments were omitted from the ROP. This comment will serve to record my opposition.

The proposed maximum grounding conductor length of 20 ft was chosen somewhat arbitrarily. There was no evidence presented to indicate that the current requirement of "as short as practicable" has been less than sufficient from a safety standpoint.

Panel Meeting Action: Reject

Panel Statement: Inclusion of the FPN would encourage the application of the 20-foot rule to apartment and commercial buildings, thereby helping to reduce voltages that may develop between the building's power and communications systems during lightning events.

Number Eligible to Vote: 15

Ballot Results: Affirmative: 14 Negative: 1

Explanation of Negative:

JOHNSON: My contention remains that the proposed maximum grounding conductor length of 20 feet was chosen somewhat arbitrarily. There was no evidence presented to indicate that the current requirement of "as short as practicable" has been less than sufficient from a safety standpoint.**Comment on Affirmative:**

BRUNSSEN: Continued rejection of this comment will help to reduce voltages that may be developed between the building's power and CATV systems during lightning events.

16-673 Log #1196 NEC-P16 **Final Action: Accept**
(820.40(A)(4))

Submitter: James E. Brunssen, Telcordia Technologies, Inc.
Comment on Proposal No: 16-163
Recommendation: CMP 16 is urged to continue to accept proposal 16-163.
Substantiation: By continuing to accept proposal 16-163, the added FPN will encourage the application of the 20-foot rule to apartment buildings and commercial buildings and will help reduce voltages that may be developed between the building's power and communications systems during lightning events. The wording of the FPN, as accepted by CMP 16, is not in violation of the NEC style manual as it is merely informative and does not contain mandatory language.
Panel Meeting Action: Accept
Number Eligible to Vote: 15
Ballot Results: Affirmative: 14 Negative: 1
Explanation of Negative:
JOHNSON: My contention remains that the proposed maximum grounding conductor length of 20 feet was chosen somewhat arbitrarily. There was no evidence presented to indicate that the current requirement of "as short as practicable" has been less than sufficient from a safety standpoint.
Comment on Affirmative:
BRUNSSEN: Continued acceptance of this comment, as well as the original proposal, will help to reduce voltages that may be developed between the building's power and CATV systems during lightning events.

16-674 Log #239 NEC-P16 **Final Action: Accept in Principle**
(820.50)

Submitter: Technical Committee on Air Conditioning
Comment on Proposal No: 16-170
Recommendation: Continue to accept this proposal.
Substantiation: Continued acceptance of this proposal will remove a conflict between NFPA 70 and NFPA 90A. NFPA 90A does not permit cables that are not listed for the application in air ducts, ceiling cavity plenums, raised floor plenums, duct distribution plenums, apparatus casing plenums and air-handling room plenums.
Panel Meeting Action: Accept in Principle
Revise section 820.50 Exception No. 3 as follows:"Exception No. 3: Unlisted outside plant coaxial cables shall be permitted within buildings in spaces other than risers, air ducts, plenums and other space used for environmental air, where the length of unlisted coaxial cable within the building, measured from its point of entrance, does not exceed 15 m (50 ft) and the unlisted coaxial cable enters the building from the outside and is terminated at a grounding block."
Panel Statement: The revised text accomplishes the same objective as the original proposal without requiring the definition of all the plenum spaces.
Number Eligible to Vote: 15
Ballot Results: Affirmative: 13 Negative: 2
Explanation of Negative:
JENSEN: Delete the term "air duct" in the Panel meeting action of Exception No. 1. Air ducts are not defined and this comment goes against Standards Council Decision 03-10-25. OHDE: I am voting negative on both the panel action and panel statement. The revised Section 820.50 Exception No. 3 as stated in Comment 16-674 uses the term "air duct". The original source of the definition of "air duct" was the NFPA 90A -2002 Standard and acceptance of this definition would be in violation of Standards Council Decision 03-10-25. As a last minute ditch effort, the definition of "air duct" was retained because it appeared in another NFPA document. The defintion of "air duct" is an extract from NFPA 97-2003.

16-675 Log #240 NEC-P16 **Final Action: Accept in Principle**
(820.50)

Submitter: Technical Committee on Air Conditioning
Comment on Proposal No: 16-169
Recommendation: Continue to accept this proposal in principle.
Substantiation: See the comment from the Technical Committee on Air Conditioning on proposal 16-170.
Panel Meeting Action: Accept in Principle
Panel Statement: See panel action and statement on Comment 16-674.
Number Eligible to Vote: 15
Ballot Results: Affirmative: 13 Negative: 2
Explanation of Negative:
JENSEN: Delete the term "air duct" in the Panel meeting action of Exception No. 1. Air ducts are not defined and this comment goes against Standards Council Decision 03-10-25. OHDE: See me Explanation of Negative vote on Comment 16-674.

16-676 Log #241 NEC-P16 **Final Action: Accept in Principle**
(820.50)

Submitter: Technical Committee on Air Conditioning
Comment on Proposal No: 16-167
Recommendation: Continue to accept this proposal in principle.
Substantiation: See the comment from the Technical Committee on Air Conditioning on proposal 16-170.
Panel Meeting Action: Accept in Principle
Panel Statement: See panel action and statement on Comment 16-674.
Number Eligible to Vote: 15
Ballot Results: Affirmative: 13 Negative: 2
Explanation of Negative:
JENSEN: Delete the term "air duct" in the Panel meeting action of Exception No. 1. Air ducts are not defined and this comment goes against Standards Council Decision 03-10-25. OHDE: See me Explanation of Negative vote on Comment 16-674.

16-677 Log #326 NEC-P16 **Final Action: Reject**
(Table 820.50)

Submitter: Technical Committee on Air Conditioning
Comment on Proposal No: 16-168
Recommendation: Continue to accept this proposal in principle.
Substantiation: See the comment from the Technical committee on Air Conditioning on proposal 16-177.
Panel Meeting Action: Reject
Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:
"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."
This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.
Number Eligible to Vote: 15
Ballot Results: Affirmative: 13 Abstain: 2
Comment on Affirmative:
OHDE: See my Affirmative Comment for Comment 16-34.
Explanation of Abstention:
DORNA: See my Explanation of Abstention for Comment 16-34.
KAHN: See my Explanation of Abstention on Comment 16-34.

16-678 Log #468 NEC-P16 **Final Action: Accept in Principle**
(820.50)

Submitter: Robert Bailey, Bailey Consulting, Inc.
Comment on Proposal No: 16-170
Recommendation: Continue to accept this proposal.
Substantiation: Continued acceptance of this proposal will improve fire safety by prohibiting non-fire-resistant cables from being run in air ducts, ceiling cavity plenums, raised floor plenums, duct distribution plenums, apparatus casing plenums and air-handling room plenums.
Panel Meeting Action: Accept in Principle
Panel Statement: See panel action and statement on Comment 16-674.
Number Eligible to Vote: 15
Ballot Results: Affirmative: 13 Negative: 2
Explanation of Negative:
JENSEN: Delete the term "air duct" in the Panel meeting action of Exception No. 1. Air ducts are not defined and this comment goes against Standards Council Decision 03-10-25. OHDE: See my Explanation of Negative vote on Comment 16-674.

16-679 Log #489 NEC-P16 **Final Action: Accept in Principle**
(820.50)

Submitter: Allen C. Weidman, The Society of the Plastics Industry, Inc.
Comment on Proposal No: 16-170
Recommendation: Continue to Accept this proposal.

Substantiation: Continued acceptance of this proposal will improve fire safety by prohibiting non-fire-resistant cables from being run in air ducts, ceiling cavity plenums, raised floor plenums, duct distribution plenums, apparatus casing plenums and air-handling room plenums.
Panel Meeting Action: Accept in Principle
Panel Statement: See panel action and statement on Comment 16-674.
Number Eligible to Vote: 15
Ballot Results: Affirmative: 13 Negative: 2
Explanation of Negative:
JENSEN: Delete the term "air duct" in the Panel meeting action of Exception No. 1. Air ducts are not defined and this comment goes against Standards Council Decision 03-10-25. OHDE: See my Explanation of Negative vote on Comment 16-674.

16-680 Log #1707 NEC-P16 **Final Action: Reject**
(Table 820.50)

Submitter: Richard P. Owen, City of St. Paul, Minnesota
Comment on Proposal No: 16-168
Recommendation: Continue to Accept this Proposal in Principle.
Substantiation: The Panel 3/Panel 16 Task Group, appointed by the NEC TCC, developed this comment.
The task group agrees with Panel 16's action and statement.
The NEC TCC Task Group on Correlation Issues Between Panels 3 and 16 met three times via teleconference calls. The assignment by the TCC Chairman was to attempt to develop a resolution and accompanying comments for the different actions taken on proposals dealing with similar issues by CMP 3 and CMP 16 for their respective Articles in Chapters 7 and 8 of the NEC.
The Task Group studied the issues and determined that there were five major differences in the actions on proposals concerning Articles 725, 760, 770, 800, 820, and 830. The voting on these issues was not unanimous but did pass as at least a simple majority of the Task Group.
One of the major differences involved installing air duct cables in a fabricated air duct without enclosing the cable in a metal raceway.
The Task Group members who attended the teleconference call voted to accept text that permits "air duct cable" to be installed in fabricated ducts without enclosing in an additional metal raceway or metal cable. The text to be accepted by Panel 3 is recommended to be similar to that found in Proposals 3-194 for Article 725 and 3-288 for Article 760. The "air duct cable" will replace the plenum cable that was previously acceptable in fabricated duct without enclosing in a metal raceway or metal cable assembly.
The following members of Panels 3 and 16 participated in this Task Group assignment: From Panel 3, Mr. Sanford E. Egesdal representing the Automatic Fire Alarm Association, Inc., Mr. Ronald E. Maassen representing the National Electrical Contractors Association, and Mr. Mark C. Ode representing Underwriters Laboratories Inc. From Panel 16, Mr. Robert W. Jensen representing the Building Industry Consulting Services International, Mr. Harold C. Ohde representing the International Brotherhood of Electrical Workers, and Mr. Joseph W. Rao representing the Independent Electrical Contractors, Inc. Mr. Richard P. Owen, the Chairman of CMP 3, representing the International Association of Electrical Inspectors, was the chairman of the Task Group.
Panel Meeting Action: Reject
Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:
"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."
This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.
Number Eligible to Vote: 15
Ballot Results: Affirmative: 13 Abstain: 2
Comment on Affirmative:
OHDE: See my Affirmative Comment for Comment 16-34.
Explanation of Abstention:
DORNA: See my Explanation of Abstention for Comment 16-34.
KAHN: See my Explanation of Abstention on Comment 16-34.

16-681 Log #2253 NEC-P16 **Final Action: Accept**
(Table 820.50)

Note: See the Technical Correlating Committee Note on Comment 16-701.
Submitter: T. David Mills, Bechtel Savannah River, Inc.
Comment on Proposal No: 16-168
Recommendation: Reject proposal in its entirety.
Substantiation:NFPA 90A - 2002 only places a restriction for cables and for testing per NFPA 262 for ceiling cavity plenums (4.3.10.2.6.1) and raised floor plenums (4.3.10.6.5.1). It does not state that these are the only places that this plenum rated cable can be used.
The other sections of NFPA 90A related to all other air spaces including "air ducts" are silent with respect to cable requirements. This indicates plenum rated cables can be placed anywhere in the air conditioning air handling system without any new "Duct" designator. There are not any other requirements in NFPA 90A to indicate anywhere that a "does not correlate" situation exists between NFPA 70 and NFPA 90A.There is no need for any additional environmental air space identifiers or cable type designators.
Panel Meeting Action: Accept
Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:
"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."
This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.
Number Eligible to Vote: 15
Ballot Results: Affirmative: 13 Abstain: 2
Comment on Affirmative:
OHDE: See my Affirmative Comment for Comment 16-34.
Explanation of Abstention:
DORNA: See my Explanation of Abstention for Comment 16-34.
KAHN: See my Explanation of Abstention on Comment 16-34.

16-682 Log #2313 NEC-P16 **Final Action: Accept**
(820.50)

Note: See the Technical Correlating Committee Note on Comment 16-701.
Submitter: Frank Bisbee, Communication Planning Corporation
Comment on Proposal No: 16-196
Recommendation: Reject this proposal.
Substantiation: In recognizing the use of "duct cable" or "limited combustible cable," the proposal fails to consider toxicity of the newly specified product and the relative incapacitation factor presented by the chemical constituents of the polymer in new cable design. A recent study by the NFPA Fire Protection Research Foundation has advanced an international effort to make certain that people can escape a burning building before being incapacitated (overcome by smoke or gases generated by thermal decomposition). The work is part of a revolution in fire safety in which codes and standards are beginning to address how much smoke, or gases generated by thermal decomposition, will incapacitate people, rather than how much will kill them.
The jacketing and insulating materials used in duct cable and limited combustible cable are subject to heat decomposition and the emission of sub-lethal toxic fumes. Some of these fumes can incapacitate (blinding and choking) the building occupants. The requirements for using "duct cable" have failed to recognize toxicity or emissions that are essentially colorless (i.e. hydrogen fluoride, which converts to hydrofluoric acid upon contact with any moisture, and other toxic gases may be generated).
In 2002, the ISO (International Organization for Standardization), a network of the industrial-standards institutes of 147 countries, put forth a new standard calling for attention to the "sub-lethal" effects of smoke - when the heat, the thickness of smoke, and the toxic gases in smoke will block vision, make a person choke or tear up, or render a person unconscious. Because of this new ISO standard, these effects of smoke are supposed to be taken into account when regulating the size and placement of exits and the types of materials allowed in buildings. But to meet the standard, one needs to know more about the smoke produced by burning various materials. Working with the National Institute of Standards and Technology, the FPRF is laying the scientific groundwork needed to put the new standard into practice. The foundation recently completed the project's second phase of its International study of the Sub-lethal Effects of Fire Smoke on Survivability and Health. In the most recent phase of the study, the foundation's researchers performed three tests: They burned a sofa made of upholstered cushions on a steel frame, some particle board bookcases, and some household cable. In each case, the materials were burned in a room with a long adjacent corridor. The researchers measured the toxic gases emitted by each item, and how quickly the gases filled the room and moved down the corridor. They determined when and where in the room and in the hallway people would have to stop because of the smoke or the heat. Fire-test laboratories and manufacturers are expected to use this data to develop smaller-scale tests that can be done in a laboratory, so they won't need to set a room on fire every time they test

a product. FPRF is uniquely equipped to conduct such studies, and NFPA officials expect more lives to be saved because of the new fire-safety standards that will emerge from this work.

By allowing and specifying the use of "duct cable," this proposal supports the use of materials counter to the findings already available in the public domain regarding sub-lethal toxicity of hydrogen fluoride and through the NFPA Fire Protection Research Foundation regarding incapacitation factors. Polymers used in duct cable and other limited combustible cable materials far exceed the incapacitation factor of other materials used in various cable construction both in generation of sub-lethal constituents and in hypertoxicity.

Panel Meeting Action: Accept

Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:

"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."

This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.

Number Eligible to Vote: 15

Ballot Results: Affirmative: 13 Abstain: 2

Comment on Affirmative:

OHDE: See my Affirmative Comment for Comment 16-34.

Explanation of Abstention:

DORNA: See my Explanation of Abstention for Comment 16-34.

KAHN: See my Explanation of Abstention on Comment 16-34.

16-683 Log #2495 NEC-P16 **Final Action: Accept**
(Table 820.50)

Note: See the Technical Correlating Committee Note on Comment 16-701.

Submitter: William A. Wolfe, Steel Tube Institute of North America

Comment on Proposal No: 16-168

Recommendation: Reject this proposal.

Substantiation: See our companion proposal on 16-37.

Panel Meeting Action: Accept

Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:

"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."

This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.

Number Eligible to Vote: 15

Ballot Results: Affirmative: 13 Abstain: 2

Comment on Affirmative:

OHDE: See my Affirmative Comment for Comment 16-34.

Explanation of Abstention:

DORNA: See my Explanation of Abstention for Comment 16-34.

KAHN: See my Explanation of Abstention on Comment 16-34.

16-684 Log #2848 NEC-P16 **Final Action: Reject**
(Table 820.50)

Submitter: Richard P. Owen, City of St. Paul, Minnesota

Comment on Proposal No: 16-168

Recommendation: Continue to accept this proposal in principle.

Substantiation: The Panel 3/Panel 16 Task Group, appointed by the NEC TCC, developed this comment.

The task group agrees with Panel 16's action and statement.

The NEC TCC Task Group on Correlation Issues Between Panels 3 and 16 met three times via teleconference calls. The assignment by the TCC Chairman was to attempt to develop a resolution and accompanying comments for the different actions taken on proposals dealing with similar issues by CMP 3 and CMP 16 for their respective Articles in Chapters 7 and 8 of the NEC.

The Task Group studied the issues and determined that there were five major differences in the actions on proposals concerning Articles 725, 760, 770, 800, 820, and 830. The voting on these issues was not unanimous but did pass as at least a simple majority of the Task Group.

One of the major differences involved installing air duct cables in a fabricated air duct without enclosing the cable in a metal raceway.

The Task Group members who attended the teleconference call voted to accept text that permits "air duct cable" to be installed in fabricated ducts without enclosing in an additional metal raceway or metal cable. The text to be accepted by Panel 3 is recommended to be similar to that found in Proposals 3-194 for Article 725 and 3-288 for Article 760. The "air duct cable" will replace the plenum cable that was previously acceptable in fabricated duct without enclosing in a metal raceway or metal cable assembly.

The following members of Panels 3 and 16 participated in this Task Group assignment: From Panel 3, Mr. Sanford E. Egesdal representing the Automatic Fire Alarm Association, Inc., Mr. Ronald E. Maassen representing the National Electrical Contractors Association, and Mr. Mark C. Ode representing Underwriters Laboratories Inc. From Panel 16, Mr. Robert W. Jensen representing the Building Industry Consulting Services International, Mr. Harold C. Ohde representing the International Brotherhood of Electrical Workers, and Mr. Joseph W. Rao representing the Independent Electrical Contractors, Inc. Mr. Richard P. Owen, the Chairman of CMP 3, representing the International Association of Electrical Inspectors, was the chairman of the Task Group.

Panel Meeting Action: Reject

Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:

"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."

This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.

Number Eligible to Vote: 15

Ballot Results: Affirmative: 13 Abstain: 2

Comment on Affirmative:

OHDE: See my Affirmative Comment for Comment 16-34.

Explanation of Abstention:

DORNA: See my Explanation of Abstention for Comment 16-34.

KAHN: See my Explanation of Abstention on Comment 16-34.

16-685 Log #2518nnnnn NEC-P16 **Final Action: Accept**
(Table 820.50)

Note: See the Technical Correlating Committee Note on Comment 16-701.

Submitter: Vince Baclawski, National Electrical Manufacturers Association (NEMA)

Comment on Proposal No: 16-168

Recommendation: Reject this proposal.

Substantiation: See our companion comment on Proposal 1-69.

Panel Meeting Action: Accept

Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:

"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."

This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.

Number Eligible to Vote: 15

Ballot Results: Affirmative: 13 Abstain: 2

Comment on Affirmative:

OHDE: See my Affirmative Comment for Comment 16-34.

Explanation of Abstention:

DORNA: See my Explanation of Abstention for Comment 16-34.

KAHN: See my Explanation of Abstention on Comment 16-34.

16-686 Log #3155 NEC-P16 **Final Action: Accept**
(Table 820.50)

Note: See the Technical Correlating Committee Note on Comment 16-701.

Submitter: Michael I. Callanan, IBEW

Comment on Proposal No: 16-168

Recommendation: Reject this proposal.

Substantiation: This proposal should be rejected as we agree with the explanation of negative of Mr. Jensen, Mr. Jones and Mr. Ohde. This comment represents the official position of the International Brotherhood of Electrical Workers Codes and Standards Committee
Panel Meeting Action: Accept
Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:
"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."
This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.
Number Eligible to Vote: 15
Ballot Results: Affirmative: 13 Abstain: 2
Comment on Affirmative:
OHDE: See my Affirmative Comment for Comment 16-34.
Explanation of Abstention:
DORNA: See my Explanation of Abstention for Comment 16-34.
KAHN: See my Explanation of Abstention on Comment 16-34.

16-687 Log #3768 NEC-P16 **Final Action: Accept**
(820.50)

Note: See the Technical Correlating Committee Note on Comment 16-701.
Submitter: Marcelo M. Hirschler, GBH International / Rep. Fire Retardant Chemicals Association
Comment on Proposal No: 16-196
Recommendation: Reject this proposal - Also reject the references to NFPA 90A in fine print notes and the creation of the new category of air duct cables and the subdivision of plenums. Revise the FPN to 820.51 as follows, and make no other changes.
~~FPN: One method of defining low smoke producing cables is by establishing an acceptable value of the smoke produced when tested in accordance with NFPA 262-1999, Standard Method of Test for Flame Travel and Smoke of Wires and Cables for Use in Air Handling Spaces, to a maximum peak optical density of 0.5 and a maximum average optical density of 0.15. Similarly, one method of defining fire resistant cables is by defining maximum allowable flame travel distance of 1.52 m (5 ft) when tested in accordance with the same test.~~
FPN: One method of defining a cable that is low smoke producing cable and fire-resistant cable is that the cable exhibits a maximum peak optical density of 0.5 or less, an average optical density of 0.15 or less, and a maximum flame spread distance of 1.52 m (5 ft) or less when tested in accordance with NFPA 262, Standard Method of Test for Flame Travel and Smoke of Wires and Cables for Use in Air Handling Spaces.
Substantiation: There is no need for a new category of CATVD cables. There is also no justification for limiting the use of traditional plenum cables. It has become clear now that the expertise needed for choosing the type of wiring systems permitted in any space should be the prerogative of the NEC, which (through its various panels and its Technical Correlating Committee) has greater expertise and a broader view than the Technical Committee on Air Conditioning (responsible for NFPA 90A). Therefore, the NEC panels should continue making their own choices regarding wiring methods. The issue of correlation (or even reference) to either NFPA 90A or the categories of plenums used in NFPA 90A should be rejected by CMP 16.
Furthermore, the reference to NFPA 90A is not appropriate in the Fine Print Note, since NFPA 90A is not a suitable standard for testing or listing wiring methods. The logical way to have a fine print note is to reference the standard used for testing the fire safety of the materials, which in this case is a combination of NFPA 255 and NFPA 259, or the UL Subject 2424 that contains all the listing requirements.
See further information in the comment I made to recommend rejection of proposal 16-177.
Panel Meeting Action: Accept
Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:
"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."
This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.
Number Eligible to Vote: 15
Ballot Results: Affirmative: 13 Abstain: 2
Comment on Affirmative:
OHDE: See my Affirmative Comment for Comment 16-34.
Explanation of Abstention:
DORNA: See my Explanation of Abstention for Comment 16-34.
KAHN: See my Explanation of Abstention on Comment 16-34.

16-688 Log #3899 NEC-P16 **Final Action: Reject**
(Table 820.50)

Submitter: Richard Fransen, Daikin America, Inc. / Rep. Cable Research Association
Comment on Proposal No: 16-168
Recommendation: Continue to accept this proposal in principle.
Substantiation: See the comment from CFRA on proposal 16-177.
Panel Meeting Action: Reject
Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:
"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."
This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.
Number Eligible to Vote: 15
Ballot Results: Affirmative: 13 Abstain: 2
Comment on Affirmative:
OHDE: See my Affirmative Comment for Comment 16-34.
Explanation of Abstention:
DORNA: See my Explanation of Abstention for Comment 16-34.
KAHN: See my Explanation of Abstention on Comment 16-34.

16-689 Log #3739 NEC-P16 **Final Action: Accept**
(820.50, 820-51 and 820-53)

Note: See the Technical Correlating Committee Note on Comment 16-701.
Submitter: Marcelo M. Hirschler, GBH International / Rep. Fire Retardant Chemicals Association
Comment on Proposal No: 16-177
Recommendation: Reject this proposal - Also reject the references to NFPA 90A in fine print notes and the creation of the new category of air duct cables and the subdivision of plenums. Revise the FPN to 820.51 as follows, and make no other changes.
~~FPN: One method of defining low smoke producing cables is by establishing an acceptable value of the smoke produced when tested in accordance with NFPA 262-1999, Standard Method of Test for Flame Travel and Smoke of Wires and Cables for Use in Air Handling Spaces, to a maximum peak optical density of 0.5 and a maximum average optical density of 0.15. Similarly, one method of defining fire resistant cables is by defining maximum allowable flame travel distance of 1.52 m (5 ft) when tested in accordance with the same test.~~
FPN: One method of defining a cable that is low smoke producing cable and fire-resistant cable is that the cable exhibits a maximum peak optical density of 0.5 or less, an average optical density of 0.15 or less, and a maximum flame spread distance of 1.52 m (5 ft) or less when tested in accordance with NFPA 262, Standard Method of Test for Flame Travel and Smoke of Wires and Cables for Use in Air Handling Spaces.
Substantiation: There is no need for a new category of CATVD cables. There is also no justification for limiting the use of traditional plenum cables. It has become clear now that the expertise needed for choosing the type of wiring systems permitted in any space should be the prerogative of the NEC, which (through its various panels and its Technical Correlating Committee) has greater expertise and a broader view than the Technical Committee on Air Conditioning (responsible for NFPA 90A). Therefore, the NEC panels should continue making their own choices regarding wiring methods. The issue of correlation (or even reference) to either NFPA 90A or the categories of plenums used in NFPA 90A should be rejected by CMP 16.
This proposal should be rejected because, as stated by Mr. Paul Casparro in his negative on proposal 3-169, the NEC is not a product catalog nor is it a design manual and is not intended to contain an all-inclusive list of permitted products. CMP 3, appropriately, did not develop any applications where "duct cable" or "air duct cable" is required instead of plenum cable.
Also, as stated by Mr. Harold Ohde in his negative on similar proposal 16-37: "Further the NEC already adequately covers wiring in spaces that provide

environmental air — whether these spaces are air ducts, air conditioning rooms, ceiling cavities, or raised floor cavities — in 300.22 (B) and 300.22 (C). Other codes should not be deciding on the types of wiring methods to be used in these spaces. The electrical experts are capable of doing this, and it is covered quite well in 300.22. The more we let those outside of the NEC make these decisions the more we weaken adoption of the NEC. Also, we could make the change and there is nothing that requires a jurisdiction to even adopt 90A. In addition, we do not find that the 90A Committee has even determined itself what minimum requirements are needed for testing electrical wiring. According to one of the speakers, 90A agreed to the proposals for coordination, but did not originate the proposals that introduce the new "air duct" cable. This appears to be an effort designed to purport on one hand that this is what 90A wants; then when they take it to 90A this summer it will be presented as a "done deal" at the NEC. There is far from consensus among the NEC committees and Panel 16 appears to be the strongest proponents."

If this proposal were approved, it would create a new category of cable, CATVD, which are simply a subset of the present category of plenum-rated cable (CATVP) (since all cables listed to UL 2424-2002 have to meet the fire safety, mechanical and electrical requirements of traditional plenum cable), while limiting the application of the latter (traditional plenum-rated cable) without any justification based on fire hazard or fire risk. It has already been shown in detail by the fire hazard and fire risk analysis presented together with my original proposals (see for example the section on pages 2080-2091 of the NEC-ROP of the substantiation for my proposal 3-130) that there is no need to change the requirements, or limit the application, for wiring methods in plenums, because the fire safety record is excellent.

In fact, if CATVP cables, i.e. traditional plenum cables meeting the requirements of NFPA 262, are to be limited in application, then cables contained in metal raceways must also be limited in application, since the work that led to the development of the requirements for plenum rated cables showed that they generate more smoke and flame spread than plenum cables meeting NFPA 262, as is clear from the following Table, containing data from the work conducted to justify the development of NFPA 262 (originally UL 910). All 11 plenum-rated cables had flame spread values not exceeding 5 ft and average optical densities not exceeding 0.15 and 10 of the 11 plenum-rated cables had peak optical densities not exceeding 0.50. On the other hand, 5 of the 17 cables in metal raceways tested had flame spread values exceeding 5 ft, 8 of the 17 cables in metal raceways tested had average optical densities exceeding 0.15 and 10 of the 17 cables in metal raceways tested had peak optical densities exceeding 0.50. This comment recognizes that cables in metal raceways are safe wiring methods for plenums. Therefore traditional plenum cables are also safe and suitable.

Furthermore, any reference to NFPA 90A is not appropriate in a Fine Print Note on fire safety characteristics of wiring methods, since NFPA 90A is not a suitable standard for testing or listing wiring methods. The logical way to have a fine print note is to reference the standard used for testing the fire safety of the materials, which in this case is a combination of NFPA 255 and NFPA 259, or the UL Subject 2424 that contains all the listing requirements.

This comment is one of a series of comments on Articles 300, 725, 760, 770, 800, 820 and 830, regarding "plenum cables". The philosophy behind all the comments is that the NEC is OK as published in 2002, but that 2 minor changes might represent improvements: (i) the clarification of the 6 inch extension of a wiring method into a more restricted environment and (ii) the clarification in the Fine Print Notes that a cable listed to NFPA 262 is listed both based on its "low-smoke" characteristics and its "low-flame-spread" characteristics, and that the two are not listed separately.

See attached comments from the chairman of the Technical Correlating Committee.

(see table on following page)

Panel Meeting Action: Accept

Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:

"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."

This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.

Number Eligible to Vote: 15

Ballot Results: Affirmative: 13 Abstain: 2

Comment on Affirmative:

OHDE: See my Affirmative Comment for Comment 16-34.

Explanation of Abstention:

DORNA: See my Explanation of Abstention for Comment 16-34.

KAHN: See my Explanation of Abstention on Comment 16-34.

16-690 Log #3741 NEC-P16 **Final Action: Accept**
(820.50, 820-51 and 820-53)

Submitter: Marcelo M. Hirschler, GBH International / Rep. Fire Retardant Chemicals Association

Comment on Proposal No: 16-174

Recommendation: Continue rejecting this proposal - Also reject the reference to NFPA 90A

Substantiation: There is no need for a new category of CATVD cables. There is also no justification for limiting the use of traditional plenum cables. It has become clear now that the expertise needed for choosing the type of wiring systems permitted in any space should be the prerogative of the NEC, which (through its various panels and its Technical Correlating Committee) has greater expertise and a broader view than the Technical Committee on Air Conditioning (responsible for NFPA 90A). Therefore, the NEC panels should continue making their own choices regarding wiring methods. The issue of correlation (or even reference) to either NFPA 90A or the categories of plenums used in NFPA 90A should be rejected by CMP 16.

Furthermore, the reference to NFPA 90A is not appropriate in the Fine Print Note, since NFPA 90A is not a suitable standard for testing or listing wiring methods. The logical way to have a fine print note is to reference the standard used for testing the fire safety of the materials, which in this case is a combination of NFPA 255 and NFPA 259, or the UL Subject 2424 that contains all the listing requirements.

See further information in the comment I made to recommend rejection of proposal 16-177.

Panel Meeting Action: Accept

Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:

"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."

This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.

Number Eligible to Vote: 15

Ballot Results: Affirmative: 13 Abstain: 2

Comment on Affirmative:

OHDE: See my Affirmative Comment for Comment 16-34.

Explanation of Abstention:

DORNA: See my Explanation of Abstention for Comment 16-34.

KAHN: See my Explanation of Abstention on Comment 16-34.

16-691 Log #3745 NEC-P16 **Final Action: Accept**
(820.50, 820-51 and 820-53)

Note: See the Technical Correlating Committee Note on Comment 16-701.

Submitter: Marcelo M. Hirschler, GBH International / Rep. Fire Retardant Chemicals Association

Comment on Proposal No: 16-168

Recommendation: Reject this proposal - Also reject the references to NFPA 90A in fine print notes and the creation of the new category of air duct cables and the subdivision of plenums. Revise the FPN to 820.51 as follows, and make no other changes.

~~FPN: One method of defining low smoke producing cables is by establishing an acceptable value of the smoke produced when tested in accordance with NFPA 262-1999, Standard Method of Test for Flame Travel and Smoke of Wires and Cables for Use in Air Handling Spaces, to a maximum peak optical density of 0.5 and a maximum average optical density of 0.15. Similarly, one method of defining fire resistant cables is by defining maximum allowable flame travel distance of 1.52 m (5 ft) when tested in accordance with the same test.~~

FPN: One method of defining a cable that is low smoke producing cable and fire-resistant cable is that the cable exhibits a maximum peak optical density of 0.5 or less, an average optical density of 0.15 or less, and a maximum flame spread distance of 1.52 m (5 ft) or less when tested in accordance with NFPA 262, Standard Method of Test for Flame Travel and Smoke of Wires and Cables for Use in Air Handling Spaces.

Comment 16-689 (Log #3739)

Table 1. Flame Spread and Optical Density of Wiring Systems

Cable	Metal Raceway	Flame Spread (ft)	Peak Optical Density	Average Optical Density
Plenum Rated Coaxial Cable	None	3.0	0.12	0.015
Plenum Rated Coaxial Cable	None	3.0	0.25	0.067
Plenum Rated Coaxial Cable	None	3.0	0.45	0.13
Plenum Rated Coaxial Cable	None	3.0	0.60	0.15
Plenum Rated Fire Alarm Cable	None	3.0	0.10	0.028
Plenum Rated Fire Alarm Cable	None	3.0	0.15	0.043
Plenum Rated Inside Wiring	None	3.0	0.35	0.121
Plenum Rated Inside wiring	None	3.0	0.25	0.047
Plenum Rated Station Wire	None	3.5	0.08	0.069
Plenum Rated Station Wire	None	3.5	0.07	-
Plenum Rated Station Wire	None	3.5	0.08	-
Plenum Cable NFPA 262 Limits	None	5.0	0.50	0.15
Coaxial Cable	Steel EMT	7.0	1.85	0.37
Coaxial Cable	Steel EMT	4.5	1.00	0.11
Fire Alarm Cable	Steel EMT	4.0	0.70	0.17
Fire Alarm Cable	Steel EMT	3.5	0.50	0.09
Inside Wiring	Steel EMT	2.5	0.14	0.069
Inside Wiring	Steel EMT	2.5	0.38	0.094
Inside Wiring	Flexible Steel	2.0	0.06	0.008
Inside Wiring	Flexible Steel	2.0	0.04	0.005
Inside Wiring	Rigid Aluminum	2.0	0.20	0.045
Inside Wiring	Flexible Aluminum	2.5	0.56	0.084
Inside Wiring	Flexible Aluminum	2.5	0.31	0.051
Station Wire	Flexible Aluminum	3.5	0.85	0.222
Station Wire	Flexible Aluminum	3.5	0.66	0.157
Fire Alarm Cable	Flexible Aluminum	6.0	0.60	0.22
Fire Alarm Cable	Flexible Aluminum	5.5	1.20	0.19
Coaxial Cable	Flexible Aluminum	13.5	1.85	0.45
Coaxial Cable	Flexible Aluminum	19.5	2.15	0.32

Substantiation: There is no need for a new category of CATVD cables. There is also no justification for limiting the use of traditional plenum cables. It has become clear now that the expertise needed for choosing the type of wiring systems permitted in any space should be the prerogative of the NEC, which (through its various panels and its Technical Correlating Committee) has greater expertise and a broader view than the Technical Committee on Air Conditioning (responsible for NFPA 90A). Therefore, the NEC panels should continue making their own choices regarding wiring methods. The issue of correlation (or even reference) to either NFPA 90A or the categories of plenums used in NFPA 90A should be rejected by CMP 16.

Furthermore, the reference to NFPA 90A is not appropriate in the Fine Print Note, since NFPA 90A is not a suitable standard for testing or listing wiring methods. The logical way to have a fine print note is to reference the standard used for testing the fire safety of the materials, which in this case is a combination of NFPA 255 and NFPA 259, or the UL Subject 2424 that contains all the listing requirements.

See further information in the comment I made to recommend rejection of proposal 16-177.

Panel Meeting Action: Accept

Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:

"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."

This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.

Number Eligible to Vote: 15

Ballot Results: Affirmative: 13 Abstain: 2

Comment on Affirmative:

OHDE: See my Affirmative Comment for Comment 16-34.

Explanation of Abstention:

DORNA: See my Explanation of Abstention for Comment 16-34.

KAHN: See my Explanation of Abstention on Comment 16-34.

16-692 Log #3747 NEC-P16 **Final Action: Accept**
(820.50, 820-51 and 820-53)

Note: See the Technical Correlating Committee Note on Comment 16-701.

Submitter: Marcelo M. Hirschler, GBH International / Rep. Fire Retardant Chemicals Association

Comment on Proposal No: 16-172

Recommendation: Reject this proposal - Also reject the references to NFPA 90A in fine print notes and the creation of the new category of air duct cables and the subdivision of plenums. Revise the FPN to 820.51 as follows, and make no other changes.

~~FPN: One method of defining low smoke producing cables is by establishing an acceptable value of the smoke produced when tested in accordance with NFPA 262-1999, Standard Method of Test for Flame Travel and Smoke of Wires and Cables for Use in Air Handling Spaces, to a maximum peak optical density of 0.5 and a maximum average optical density of 0.15. Similarly, one method of defining fire resistant cables is by defining maximum allowable flame travel distance of 1.52 m (5 ft) when tested in accordance with the same test.~~

FPN: One method of defining a cable that is low smoke producing cable and fire-resistant cable is that the cable exhibits a maximum peak optical density of 0.5 or less, an average optical density of 0.15 or less, and a maximum flame spread distance of 1.52 m (5 ft) or less when tested in accordance with NFPA 262, Standard Method of Test for Flame Travel and Smoke of Wires and Cables for Use in Air Handling Spaces.

Substantiation: There is no need for a new category of CATVD cables. There is also no justification for limiting the use of traditional plenum cables. It has become clear now that the expertise needed for choosing the type of wiring systems permitted in any space should be the prerogative of the NEC, which (through its various panels and its Technical Correlating Committee) has greater expertise and a broader view than the Technical Committee on Air Conditioning (responsible for NFPA 90A). Therefore, the NEC panels should continue making their own choices regarding wiring methods. The issue of correlation (or even reference) to either NFPA 90A or the categories of plenums used in NFPA 90A should be rejected by CMP 16.

Furthermore, the reference to NFPA 90A is not appropriate in the Fine Print Note, since NFPA 90A is not a suitable standard for testing or listing wiring methods. The logical way to have a fine print note is to reference the standard used for testing the fire safety of the materials, which in this case is a combination of NFPA 255 and NFPA 259, or the UL Subject 2424 that contains all the listing requirements.

See further information in the comment I made to recommend rejection of proposal 16-177.

Panel Meeting Action: Accept

Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:

"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."

This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.

Number Eligible to Vote: 15

Ballot Results: Affirmative: 13 Abstain: 2

Comment on Affirmative:

OHDE: See my Affirmative Comment for Comment 16-34.

Explanation of Abstention:

DORNA: See my Explanation of Abstention for Comment 16-34.

KAHN: See my Explanation of Abstention on Comment 16-34.

16-693 Log #3748 NEC-P16 **Final Action: Accept**
(820.50, 820-51 and 820-53)

Note: See the Technical Correlating Committee Note on Comment 16-701.

Submitter: Marcelo M. Hirschler, GBH International / Rep. Fire Retardant Chemicals Association

Comment on Proposal No: 16-173

Recommendation: Reject this proposal - Also reject the references to NFPA 90A in fine print notes and the creation of the new category of air duct cables and the subdivision of plenums. Revise the FPN to 820.51 as follows, and make no other changes.

~~FPN: One method of defining low smoke producing cables is by establishing an acceptable value of the smoke produced when tested in accordance with NFPA 262-1999, Standard Method of Test for Flame Travel and Smoke of Wires and Cables for Use in Air Handling Spaces, to a maximum peak optical density of 0.5 and a maximum average optical density of 0.15. Similarly, one method of defining fire resistant cables is by defining maximum allowable flame travel distance of 1.52 m (5 ft) when tested in accordance with the same test.~~

FPN: One method of defining a cable that is low smoke producing cable and fire-resistant cable is that the cable exhibits a maximum peak optical density of 0.5 or less, an average optical density of 0.15 or less, and a maximum flame spread distance of 1.52 m (5 ft) or less when tested in accordance with NFPA 262, Standard Method of Test for Flame Travel and Smoke of Wires and Cables for Use in Air Handling Spaces.

Substantiation: There is no need for a new category of CATVD cables. There is also no justification for limiting the use of traditional plenum cables. It has become clear now that the expertise needed for choosing the type of wiring systems permitted in any space should be the prerogative of the NEC, which (through its various panels and its Technical Correlating Committee) has greater expertise and a broader view than the Technical Committee on Air Conditioning (responsible for NFPA 90A). Therefore, the NEC panels should continue making their own choices regarding wiring methods. The issue of correlation (or even reference) to either NFPA 90A or the categories of plenums used in NFPA 90A should be rejected by CMP 16.

Furthermore, the reference to NFPA 90A is not appropriate in the Fine Print Note, since NFPA 90A is not a suitable standard for testing or listing wiring methods. The logical way to have a fine print note is to reference the standard used for testing the fire safety of the materials, which in this case is a combination of NFPA 255 and NFPA 259, or the UL Subject 2424 that contains all the listing requirements.

See further information in the comment I made to recommend rejection of proposal 16-177.

Panel Meeting Action: Accept

Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:

"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project

on the applicable technical subjects pending completion of the NFPA 90A revision cycle."

This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.

Number Eligible to Vote: 15
Ballot Results: Affirmative: 13 Abstain: 2
Comment on Affirmative:
OHDE: See my Affirmative Comment for Comment 16-34.
Explanation of Abstention:
DORNA: See my Explanation of Abstention for Comment 16-34.
KAHN: See my Explanation of Abstention on Comment 16-34.

16-694 Log #3755 NEC-P16 **Final Action: Accept**
(820.50, 820-51 and 820-53)

Note: See the Technical Correlating Committee Note on Comment 16-701.
Submitter: Marcelo M. Hirschler, GBH International / Rep. Fire Retardant Chemicals Association
Comment on Proposal No: 16-176
Recommendation: Reject this proposal - Also reject the references to NFPA 90A in fine print notes and the creation of the new category of air duct cables and the subdivision of plenums. Revise the FPN to 820.51 as follows, and make no other changes.
~~FPN: One method of defining low smoke producing cables is by establishing an acceptable value of the smoke produced when tested in accordance with NFPA 262 1999, Standard Method of Test for Flame Travel and Smoke of Wires and Cables for Use in Air Handling Spaces, to a maximum peak optical density of 0.5 and a maximum average optical density of 0.15. Similarly, one method of defining fire resistant cables is by defining maximum allowable flame travel distance of 1.52 m (5 ft) when tested in accordance with the same test.~~
FPN: One method of defining a cable that is low smoke producing cable and fire-resistant cable is that the cable exhibits a maximum peak optical density of 0.5 or less, an average optical density of 0.15 or less, and a maximum flame spread distance of 1.52 m (5 ft) or less when tested in accordance with NFPA 262, Standard Method of Test for Flame Travel and Smoke of Wires and Cables for Use in Air Handling Spaces.
Substantiation: There is no need for a new category of CATVD cables. There is also no justification for limiting the use of traditional plenum cables. It has become clear now that the expertise needed for choosing the type of wiring systems permitted in any space should be the prerogative of the NEC, which (through its various panels and its Technical Correlating Committee) has greater expertise and a broader view than the Technical Committee on Air Conditioning (responsible for NFPA 90A). Therefore, the NEC panels should continue making their own choices regarding wiring methods. The issue of correlation (or even reference) to either NFPA 90A or the categories of plenums used in NFPA 90A should be rejected by CMP 16.

Furthermore, the reference to NFPA 90A is not appropriate in the Fine Print Note, since NFPA 90A is not a suitable standard for testing or listing wiring methods. The logical way to have a fine print note is to reference the standard used for testing the fire safety of the materials, which in this case is a combination of NFPA 255 and NFPA 259, or the UL Subject 2424 that contains all the listing requirements.

See further information in the comment I made to recommend rejection of proposal 16-177.
Panel Meeting Action: Accept
Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:

"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."

This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.

Number Eligible to Vote: 15
Ballot Results: Affirmative: 13 Abstain: 2
Comment on Affirmative:
OHDE: See my Affirmative Comment for Comment 16-34.
Explanation of Abstention:
DORNA: See my Explanation of Abstention for Comment 16-34.
KAHN: See my Explanation of Abstention on Comment 16-34.

16-695 Log #3757 NEC-P16 **Final Action: Accept**
(820.50, 820-51 and 820-53)

Note: See the Technical Correlating Committee Note on Comment 16-701.
Submitter: Marcelo M. Hirschler, GBH International / Rep. Fire Retardant Chemicals Association
Comment on Proposal No: 16-178
Recommendation: Reject this proposal - Also reject the references to NFPA 90A in fine print notes and the creation of the new category of air duct cables and the subdivision of plenums. Revise the FPN to 820.51 as follows, and make no other changes.
~~FPN: One method of defining low smoke producing cables is by establishing an acceptable value of the smoke produced when tested in accordance with NFPA 262 1999, Standard Method of Test for Flame Travel and Smoke of Wires and Cables for Use in Air Handling Spaces, to a maximum peak optical density of 0.5 and a maximum average optical density of 0.15. Similarly, one method of defining fire resistant cables is by defining maximum allowable flame travel distance of 1.52 m (5 ft) when tested in accordance with the same test.~~
FPN: One method of defining a cable that is low smoke producing cable and fire-resistant cable is that the cable exhibits a maximum peak optical density of 0.5 or less, an average optical density of 0.15 or less, and a maximum flame spread distance of 1.52 m (5 ft) or less when tested in accordance with NFPA 262, Standard Method of Test for Flame Travel and Smoke of Wires and Cables for Use in Air Handling Spaces.
Substantiation: There is no need for a new category of CATVD cables. There is also no justification for limiting the use of traditional plenum cables. It has become clear now that the expertise needed for choosing the type of wiring systems permitted in any space should be the prerogative of the NEC, which (through its various panels and its Technical Correlating Committee) has greater expertise and a broader view than the Technical Committee on Air Conditioning (responsible for NFPA 90A). Therefore, the NEC panels should continue making their own choices regarding wiring methods. The issue of correlation (or even reference) to either NFPA 90A or the categories of plenums used in NFPA 90A should be rejected by CMP 16.

Furthermore, the reference to NFPA 90A is not appropriate in the Fine Print Note, since NFPA 90A is not a suitable standard for testing or listing wiring methods. The logical way to have a fine print note is to reference the standard used for testing the fire safety of the materials, which in this case is a combination of NFPA 255 and NFPA 259, or the UL Subject 2424 that contains all the listing requirements.

See further information in the comment I made to recommend rejection of proposal 16-177.
Panel Meeting Action: Accept
Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:

"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."

This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.

Number Eligible to Vote: 15
Ballot Results: Affirmative: 13 Abstain: 2
Comment on Affirmative:
OHDE: See my Affirmative Comment for Comment 16-34.
Explanation of Abstention:
DORNA: See my Explanation of Abstention for Comment 16-34.
KAHN: See my Explanation of Abstention on Comment 16-34.

16-696 Log #3759 NEC-P16 **Final Action: Accept**
(820.50, 820-51 and 820-53)

Note: See the Technical Correlating Committee Note on Comment 16-701.
Submitter: Marcelo M. Hirschler, GBH International / Rep. Fire Retardant Chemicals Association
Comment on Proposal No: 16-179
Recommendation: Reject this proposal - Also reject the references to NFPA 90A in fine print notes and the creation of the new category of air duct cables and the subdivision of plenums. Revise the FPN to 820.51 as follows, and make no other changes.
~~FPN: One method of defining low smoke producing cables is by establishing an acceptable value of the smoke produced when tested in accordance with NFPA 262 1999, Standard Method of Test for Flame Travel and Smoke of Wires and Cables for Use in Air Handling Spaces, to a maximum peak optical density of 0.5 and a maximum average optical density of 0.15. Similarly, one method of defining fire resistant cables is by defining maximum allowable flame travel distance of 1.52 m (5 ft) when tested in accordance with the same test.~~

FPN: One method of defining a cable that is low smoke producing cable and fire-resistant cable is that the cable exhibits a maximum peak optical density of 0.5 or less, an average optical density of 0.15 or less, and a maximum flame spread distance of 1.52 m (5 ft) or less when tested in accordance with NFPA 262, Standard Method of Test for Flame Travel and Smoke of Wires and Cables for Use in Air Handling Spaces.

Substantiation: There is no need for a new category of CATVD cables. There is also no justification for limiting the use of traditional plenum cables. It has become clear now that the expertise needed for choosing the type of wiring systems permitted in any space should be the prerogative of the NEC, which (through its various panels and its Technical Correlating Committee) has greater expertise and a broader view than the Technical Committee on Air Conditioning (responsible for NFPA 90A). Therefore, the NEC panels should continue making their own choices regarding wiring methods. The issue of correlation (or even reference) to either NFPA 90A or the categories of plenums used in NFPA 90A should be rejected by CMP 16.

Furthermore, the reference to NFPA 90A is not appropriate in the Fine Print Note, since NFPA 90A is not a suitable standard for testing or listing wiring methods. The logical way to have a fine print note is to reference the standard used for testing the fire safety of the materials, which in this case is a combination of NFPA 255 and NFPA 259, or the UL Subject 2424 that contains all the listing requirements.

See further information in the comment I made to recommend rejection of proposal 16-177.

Panel Meeting Action: Accept

Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:

"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."

This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.

Number Eligible to Vote: 15

Ballot Results: Affirmative: 13 Abstain: 2

Comment on Affirmative:

OHDE: See my Affirmative Comment for Comment 16-34.

Explanation of Abstention:

DORNA: See my Explanation of Abstention for Comment 16-34.

KAHN: See my Explanation of Abstention on Comment 16-34.

16-697 Log #3761 NEC-P16 **Final Action: Accept**
(820.50, 820-51 and 820-53)

Note: See the Technical Correlating Committee Note on Comment 16-701.

Submitter: Marcelo M. Hirschler, GBH International / Rep. Fire Retardant Chemicals Association

Comment on Proposal No: 16-181

Recommendation: Reject this proposal - Also reject the references to NFPA 90A in fine print notes and the creation of the new category of air duct cables and the subdivision of plenums. Revise the FPN to 820.51 as follows, and make no other changes.

~~FPN: One method of defining low smoke producing cables is by establishing an acceptable value of the smoke produced when tested in accordance with NFPA 262-1999, Standard Method of Test for Flame Travel and Smoke of Wires and Cables for Use in Air Handling Spaces, to a maximum peak optical density of 0.5 and a maximum average optical density of 0.15. Similarly, one method of defining fire resistant cables is by defining maximum allowable flame travel distance of 1.52 m (5 ft) when tested in accordance with the same test.~~

FPN: One method of defining a cable that is low smoke producing cable and fire-resistant cable is that the cable exhibits a maximum peak optical density of 0.5 or less, an average optical density of 0.15 or less, and a maximum flame spread distance of 1.52 m (5 ft) or less when tested in accordance with NFPA 262, Standard Method of Test for Flame Travel and Smoke of Wires and Cables for Use in Air Handling Spaces.

Substantiation: There is no need for a new category of CATVD cables. There is also no justification for limiting the use of traditional plenum cables. It has become clear now that the expertise needed for choosing the type of wiring systems permitted in any space should be the prerogative of the NEC, which (through its various panels and its Technical Correlating Committee) has greater expertise and a broader view than the Technical Committee on Air Conditioning (responsible for NFPA 90A). Therefore, the NEC panels should continue making their own choices regarding wiring methods. The issue of correlation (or even reference) to either NFPA 90A or the categories of plenums used in NFPA 90A should be rejected by CMP 16.

Furthermore, the reference to NFPA 90A is not appropriate in the Fine Print Note, since NFPA 90A is not a suitable standard for testing or listing wiring methods. The logical way to have a fine print note is to reference the standard used for testing the fire safety of the materials, which in this case is a combination of NFPA 255 and NFPA 259, or the UL Subject 2424 that contains all the listing requirements.

See further information in the comment I made to recommend rejection of proposal 16-177.

Panel Meeting Action: Accept

Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:

"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."

This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.

Number Eligible to Vote: 15

Ballot Results: Affirmative: 13 Abstain: 2

Comment on Affirmative:

OHDE: See my Affirmative Comment for Comment 16-34.

Explanation of Abstention:

DORNA: See my Explanation of Abstention for Comment 16-34.

KAHN: See my Explanation of Abstention on Comment 16-34.

16-698 Log #3762 NEC-P16 **Final Action: Accept**
(820.50, 820-51 and 820-53)

Note: See the Technical Correlating Committee Note on Comment 16-701.

Submitter: Marcelo M. Hirschler, GBH International / Rep. Fire Retardant Chemicals Association

Comment on Proposal No: 16-182

Recommendation: Reject this proposal - Also reject the references to NFPA 90A in fine print notes and the creation of the new category of air duct cables and the subdivision of plenums. Revise the FPN to 820.51 as follows, and make no other changes.

~~FPN: One method of defining low smoke producing cables is by establishing an acceptable value of the smoke produced when tested in accordance with NFPA 262-1999, Standard Method of Test for Flame Travel and Smoke of Wires and Cables for Use in Air Handling Spaces, to a maximum peak optical density of 0.5 and a maximum average optical density of 0.15. Similarly, one method of defining fire resistant cables is by defining maximum allowable flame travel distance of 1.52 m (5 ft) when tested in accordance with the same test.~~

FPN: One method of defining a cable that is low smoke producing cable and fire-resistant cable is that the cable exhibits a maximum peak optical density of 0.5 or less, an average optical density of 0.15 or less, and a maximum flame spread distance of 1.52 m (5 ft) or less when tested in accordance with NFPA 262, Standard Method of Test for Flame Travel and Smoke of Wires and Cables for Use in Air Handling Spaces.

Substantiation: There is no need for a new category of CATVD cables. There is also no justification for limiting the use of traditional plenum cables. It has become clear now that the expertise needed for choosing the type of wiring systems permitted in any space should be the prerogative of the NEC, which (through its various panels and its Technical Correlating Committee) has greater expertise and a broader view than the Technical Committee on Air Conditioning (responsible for NFPA 90A). Therefore, the NEC panels should continue making their own choices regarding wiring methods. The issue of correlation (or even reference) to either NFPA 90A or the categories of plenums used in NFPA 90A should be rejected by CMP 16.

Furthermore, the reference to NFPA 90A is not appropriate in the Fine Print Note, since NFPA 90A is not a suitable standard for testing or listing wiring methods. The logical way to have a fine print note is to reference the standard used for testing the fire safety of the materials, which in this case is a combination of NFPA 255 and NFPA 259, or the UL Subject 2424 that contains all the listing requirements.

See further information in the comment I made to recommend rejection of proposal 16-177.

Panel Meeting Action: Accept

Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:

"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that

interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."

This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.

Number Eligible to Vote: 15

Ballot Results: Affirmative: 13 Abstain: 2

Comment on Affirmative:

OHDE: See my Affirmative Comment for Comment 16-34.

Explanation of Abstention:

DORNA: See my Explanation of Abstention for Comment 16-34.

KAHN: See my Explanation of Abstention on Comment 16-34.

16-699 Log #3764 NEC-P16 **Final Action: Accept**
(820.50, 820-51 and 820-53)

Note: See the Technical Correlating Committee Note on Comment 16-701.

Submitter: Marcelo M. Hirschler, GBH International / Rep. Fire Retardant Chemicals Association

Comment on Proposal No: 16-183

Recommendation: Reject this proposal - Also reject the references to NFPA 90A in fine print notes and the creation of the new category of air duct cables and the subdivision of plenums. Revise the FPN to 820.51 as follows, and make no other changes.

~~FPN: One method of defining low smoke producing cables is by establishing an acceptable value of the smoke produced when tested in accordance with NFPA 262 1999, Standard Method of Test for Flame Travel and Smoke of Wires and Cables for Use in Air Handling Spaces, to a maximum peak optical density of 0.5 and a maximum average optical density of 0.15. Similarly, one method of defining fire resistant cables is by defining maximum allowable flame travel distance of 1.52 m (5 ft) when tested in accordance with the same test.~~

FPN: One method of defining a cable that is low smoke producing cable and fire-resistant cable is that the cable exhibits a maximum peak optical density of 0.5 or less, an average optical density of 0.15 or less, and a maximum flame spread distance of 1.52 m (5 ft) or less when tested in accordance with NFPA 262, Standard Method of Test for Flame Travel and Smoke of Wires and Cables for Use in Air Handling Spaces.

Substantiation: There is no need for a new category of CATVD cables. There is also no justification for limiting the use of traditional plenum cables. It has become clear now that the expertise needed for choosing the type of wiring systems permitted in any space should be the prerogative of the NEC, which (through its various panels and its Technical Correlating Committee) has greater expertise and a broader view than the Technical Committee on Air Conditioning (responsible for NFPA 90A). Therefore, the NEC panels should continue making their own choices regarding wiring methods. The issue of correlation (or even reference) to either NFPA 90A or the categories of plenums used in NFPA 90A should be rejected by CMP 16.

Furthermore, the reference to NFPA 90A is not appropriate in the Fine Print Note, since NFPA 90A is not a suitable standard for testing or listing wiring methods. The logical way to have a fine print note is to reference the standard used for testing the fire safety of the materials, which in this case is a combination of NFPA 255 and NFPA 259, or the UL Subject 2424 that contains all the listing requirements.

See further information in the comment I made to recommend rejection of proposal 16-177.

Panel Meeting Action: Accept

Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:

"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."

This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.

Number Eligible to Vote: 15

Ballot Results: Affirmative: 13 Abstain: 2

Comment on Affirmative:

OHDE: See my Affirmative Comment for Comment 16-34.

Explanation of Abstention:

DORNA: See my Explanation of Abstention for Comment 16-34.

KAHN: See my Explanation of Abstention on Comment 16-34.

16-700 Log #3766 NEC-P16 **Final Action: Accept**
(820.50, 820-51 and 820-53)

Note: See the Technical Correlating Committee Note on Comment 16-701.

Submitter: Marcelo M. Hirschler, GBH International / Rep. Fire Retardant Chemicals Association

Comment on Proposal No: 16-184

Recommendation: Reject this proposal - Also reject the references to NFPA 90A in fine print notes and the creation of the new category of air duct cables and the subdivision of plenums. Revise the FPN to 820.51 as follows, and make no other changes.

~~FPN: One method of defining low smoke producing cables is by establishing an acceptable value of the smoke produced when tested in accordance with NFPA 262 1999, Standard Method of Test for Flame Travel and Smoke of Wires and Cables for Use in Air Handling Spaces, to a maximum peak optical density of 0.5 and a maximum average optical density of 0.15. Similarly, one method of defining fire resistant cables is by defining maximum allowable flame travel distance of 1.52 m (5 ft) when tested in accordance with the same test.~~

FPN: One method of defining a cable that is low smoke producing cable and fire-resistant cable is that the cable exhibits a maximum peak optical density of 0.5 or less, an average optical density of 0.15 or less, and a maximum flame spread distance of 1.52 m (5 ft) or less when tested in accordance with NFPA 262, Standard Method of Test for Flame Travel and Smoke of Wires and Cables for Use in Air Handling Spaces.

Substantiation: There is no need for a new category of CATVD cables. There is also no justification for limiting the use of traditional plenum cables. It has become clear now that the expertise needed for choosing the type of wiring systems permitted in any space should be the prerogative of the NEC, which (through its various panels and its Technical Correlating Committee) has greater expertise and a broader view than the Technical Committee on Air Conditioning (responsible for NFPA 90A). Therefore, the NEC panels should continue making their own choices regarding wiring methods. The issue of correlation (or even reference) to either NFPA 90A or the categories of plenums used in NFPA 90A should be rejected by CMP 16.

Furthermore, the reference to NFPA 90A is not appropriate in the Fine Print Note, since NFPA 90A is not a suitable standard for testing or listing wiring methods. The logical way to have a fine print note is to reference the standard used for testing the fire safety of the materials, which in this case is a combination of NFPA 255 and NFPA 259, or the UL Subject 2424 that contains all the listing requirements.

See further information in the comment I made to recommend rejection of proposal 16-177.

Panel Meeting Action: Accept

Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:

"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."

This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.

Number Eligible to Vote: 15

Ballot Results: Affirmative: 13 Abstain: 2

Comment on Affirmative:

OHDE: See my Affirmative Comment for Comment 16-34.

Explanation of Abstention:

DORNA: See my Explanation of Abstention for Comment 16-34.

KAHN: See my Explanation of Abstention on Comment 16-34.

16-701 Log #2267 NEC-P16 **Final Action: Accept**
(820.50, 820.51 & 820.53)

Note: The Technical Correlating Committee understands that the acceptance of Comment 16-701 reverts Table 820-50 back to the table as it appears in the 2002 NEC. The Technical Correlating Committee understands that the acceptance of Comment 16-701 reinstates 820.53 as it reads in the 2002 NEC except as amended by Comment 16-848, which added a new FPN to 820.53(A). The Technical Correlating Committee understands that the acceptance of Comment 16-701 reinstates 820-51 as it reads in the 2002 NEC except as amended by Comment 16-689 and others, which revised the FPN to 820.51(A). The Technical Correlating Committee understands that the acceptance of Comment 16-701 does not reject the acceptance of the renumbering in as detailed in Comment 16-9.bb

Submitter: Frank Bisbee, Communication Planning Corporation

Comment on Proposal No: 16-177

Recommendation: Reject this proposal.

Substantiation: In recognizing the use of "duct cable" or "limited combustible cable," the proposal fails to consider toxicity of the newly specified product and the relative incapacitation factor presented by the chemical constituents of the polymer in new cable design. A recent study by the NFPA Fire Protection Research Foundation has advanced an international effort to make certain that people can escape a burning building before being incapacitated (overcome by smoke or gases generated by thermal decomposition). The work is part of a revolution in fire safety in which codes and standards are beginning to address how much smoke, or gases generated by thermal decomposition, will

incapacitate people, rather than how much will kill them.

The jacketing and insulating materials used in duct cable and limited combustible cable are subject to heat decomposition and the emission of sub-lethal toxic fumes. Some of these fumes can incapacitate (blinding and choking) the building occupants. The requirements for using "duct cable" have failed to recognize toxicity or emissions that are essentially colorless (i.e. hydrogen fluoride, which converts to hydrofluoric acid upon contact with any moisture, and other toxic gases may be generated).

In 2002, the ISO (International Organization for Standardization), a network of the industrial-standards institutes of 147 countries, put forth a new standard calling for attention to the "sub-lethal" effects of smoke - when the heat, the thickness of smoke, and the toxic gases in smoke will block vision, make a person choke or tear up, or render a person unconscious. Because of this new ISO standard, these effects of smoke are supposed to be taken into account when regulating the size and placement of exits and the types of materials allowed in buildings. But to meet the standard, one needs to know more about the smoke produced by burning various materials. Working with the National Institute of Standards and Technology, the FPRF is laying the scientific groundwork needed to put the new standard into practice. The foundation recently completed the project's second phase of its International study of the Sub-lethal Effects of Fire Smoke on Survivability and Health. In the most recent phase of the study, the foundation's researchers performed three tests: They burned a sofa made of upholstered cushions on a steel frame, some particle board bookcases, and some household cable. In each case, the materials were burned in a room with a long adjacent corridor. The researchers measured the toxic gases emitted by each item, and how quickly the gases filled the room and moved down the corridor. They determined when and where in the room and in the hallway people would have to stop because of the smoke or the heat. Fire-test laboratories and manufacturers are expected to use this data to develop smaller-scale tests that can be done in a laboratory, so they won't need to set a room on fire every time they test a product. FPRF is uniquely equipped to conduct such studies, and NFPA officials expect more lives to be saved because of the new fire-safety standards that will emerge from this work.

By allowing and specifying the use of "duct cable," this proposal supports the use of materials counter to the findings already available in the public domain regarding sub-lethal toxicity of hydrogen fluoride and through the NFPA Fire Protection Research Foundation regarding incapacitation factors. Polymers used in duct cable and other limited combustible cable materials far exceed the incapacitation factor of other materials used in various cable construction both in generation of sub-lethal constituents and in hypertoxicity.

Panel Meeting Action: Accept

Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:

"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."

This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.

Number Eligible to Vote: 15

Ballot Results: Affirmative: 13 Abstain: 2

Comment on Affirmative:

OHDE: See my Affirmative Comment for Comment 16-34.

Explanation of Abstention:

DORNA: See my Explanation of Abstention for Comment 16-34.

KAHN: See my Explanation of Abstention on Comment 16-34.

16-702 Log #2262 NEC-P16 **Final Action: Accept**
(820.50, 820.51 and 820.53)

Submitter: Frank Bisbee, Communication Planning Corporation

Comment on Proposal No: 16-174

Recommendation: Reject this proposal.

Substantiation: In recognizing the use of "duct cable" or "limited combustible cable," the proposal fails to consider toxicity of the newly specified product and the relative incapacitation factor presented by the chemical constituents of the polymer in new cable design. A recent study by the NFPA Fire Protection Research Foundation has advanced an international effort to make certain that people can escape a burning building before being incapacitated (overcome by smoke or gases generated by thermal decomposition). The work is part of a revolution in fire safety in which codes and standards are beginning to address how much smoke, or gases generated by thermal decomposition, will incapacitate people, rather than how much will kill them.

The jacketing and insulating materials used in duct cable and limited combustible cable are subject to heat decomposition and the emission of sub-lethal toxic fumes. Some of these fumes can incapacitate (blinding and choking) the building occupants. The requirements for using "duct cable" have failed to recognize toxicity or emissions that are essentially colorless (i.e. hydrogen fluoride, which converts to hydrofluoric acid upon contact with any moisture, and other toxic gases may be generated).

In 2002, the ISO (International Organization for Standardization), a network of the industrial-standards institutes of 147 countries, put forth a new standard calling for attention to the "sub-lethal" effects of smoke - when the heat, the thickness of smoke, and the toxic gases in smoke will block vision, make a person choke or tear up, or render a person unconscious. Because of this new ISO standard, these effects of smoke are supposed to be taken into account when regulating the size and placement of exits and the types of materials allowed in buildings. But to meet the standard, one needs to know more about the smoke produced by burning various materials. Working with the National Institute of Standards and Technology, the FPRF is laying the scientific groundwork needed to put the new standard into practice. The foundation recently completed the project's second phase of its International study of the Sub-lethal Effects of Fire Smoke on Survivability and Health. In the most recent phase of the study, the foundation's researchers performed three tests: They burned a sofa made of upholstered cushions on a steel frame, some particle board bookcases, and some household cable. In each case, the materials were burned in a room with a long adjacent corridor. The researchers measured the toxic gases emitted by each item, and how quickly the gases filled the room and moved down the corridor. They determined when and where in the room and in the hallway people would have to stop because of the smoke or the heat. Fire-test laboratories and manufacturers are expected to use this data to develop smaller-scale tests that can be done in a laboratory, so they won't need to set a room on fire every time they test a product. FPRF is uniquely equipped to conduct such studies, and NFPA officials expect more lives to be saved because of the new fire-safety standards that will emerge from this work.

By allowing and specifying the use of "duct cable," this proposal supports the use of materials counter to the findings already available in the public domain regarding sub-lethal toxicity of hydrogen fluoride and through the NFPA Fire Protection Research Foundation regarding incapacitation factors. Polymers used in duct cable and other limited combustible cable materials far exceed the incapacitation factor of other materials used in various cable construction both in generation of sub-lethal constituents and in hypertoxicity.

Panel Meeting Action: Accept

Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:

"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."

This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.

Number Eligible to Vote: 15

Ballot Results: Affirmative: 13 Abstain: 2

Comment on Affirmative:

OHDE: See my Affirmative Comment for Comment 16-34.

Explanation of Abstention:

DORNA: See my Explanation of Abstention for Comment 16-34.

KAHN: See my Explanation of Abstention on Comment 16-34.

16-703 Log #2263 NEC-P16 **Final Action: Accept**
(820.50, 820.51 and 820.53)

Note: See the Technical Correlating Committee Note on Comment 16-701.

Submitter: Frank Bisbee, Communication Planning Corporation

Comment on Proposal No: 16-176

Recommendation: Reject this proposal.

Substantiation: In recognizing the use of "duct cable" or "limited combustible cable," the proposal fails to consider toxicity of the newly specified product and the relative incapacitation factor presented by the chemical constituents of the polymer in new cable design. A recent study by the NFPA Fire Protection Research Foundation has advanced an international effort to make certain that people can escape a burning building before being incapacitated (overcome by smoke or gases generated by thermal decomposition). The work is part of a revolution in fire safety in which codes and standards are beginning to address how much smoke, or gases generated by thermal decomposition, will incapacitate people, rather than how much will kill them.

The jacketing and insulating materials used in duct cable and limited combustible cable are subject to heat decomposition and the emission of

sub-lethal toxic fumes. Some of these fumes can incapacitate (blinding and choking) the building occupants. The requirements for using "duct cable" have failed to recognize toxicity or emissions that are essentially colorless (i.e. hydrogen fluoride, which converts to hydrofluoric acid upon contact with any moisture, and other toxic gases may be generated).

In 2002, the ISO (International Organization for Standardization), a network of the industrial-standards institutes of 147 countries, put forth a new standard calling for attention to the "sub-lethal" effects of smoke - when the heat, the thickness of smoke, and the toxic gases in smoke will block vision, make a person choke or tear up, or render a person unconscious. Because of this new ISO standard, these effects of smoke are supposed to be taken into account when regulating the size and placement of exits and the types of materials allowed in buildings. But to meet the standard, one needs to know more about the smoke produced by burning various materials. Working with the National Institute of Standards and Technology, the FPRF is laying the scientific groundwork needed to put the new standard into practice. The foundation recently completed the project's second phase of its International study of the Sub-lethal Effects of Fire Smoke on Survivability and Health. In the most recent phase of the study, the foundation's researchers performed three tests: They burned a sofa made of upholstered cushions on a steel frame, some particle board bookcases, and some household cable. In each case, the materials were burned in a room with a long adjacent corridor. The researchers measured the toxic gases emitted by each item, and how quickly the gases filled the room and moved down the corridor. They determined when and where in the room and in the hallway people would have to stop because of the smoke or the heat. Fire-test laboratories and manufacturers are expected to use this data to develop smaller-scale tests that can be done in a laboratory, so they won't need to set a room on fire every time they test a product. FPRF is uniquely equipped to conduct such studies, and NFPA officials expect more lives to be saved because of the new fire-safety standards that will emerge from this work.

By allowing and specifying the use of "duct cable," this proposal supports the use of materials counter to the findings already available in the public domain regarding sub-lethal toxicity of hydrogen fluoride and through the NFPA Fire Protection Research Foundation regarding incapacitation factors. Polymers used in duct cable and other limited combustible cable materials far exceed the incapacitation factor of other materials used in various cable construction both in generation of sub-lethal constituents and in hypertoxicity.

Panel Meeting Action: Accept

Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:

"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."

This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.

Number Eligible to Vote: 15

Ballot Results: Affirmative: 13 Abstain: 2

Comment on Affirmative:

OHDE: See my Affirmative Comment for Comment 16-34.

Explanation of Abstention:

DORNA: See my Explanation of Abstention for Comment 16-34.

KAHN: See my Explanation of Abstention on Comment 16-34.

16-704 Log #2264 NEC-P16 **Final Action: Accept**
(820.50, 820.51 and 820.53)

Note: See the Technical Correlating Committee Note on Comment 16-701.

Submitter: Frank Bisbee, Communication Planning Corporation

Comment on Proposal No: 16-173

Recommendation: Reject this proposal.

Substantiation: In recognizing the use of "duct cable" or "limited combustible cable," the proposal fails to consider toxicity of the newly specified product and the relative incapacitation factor presented by the chemical constituents of the polymer in new cable design. A recent study by the NFPA Fire Protection Research Foundation has advanced an international effort to make certain that people can escape a burning building before being incapacitated (overcome by smoke or gases generated by thermal decomposition). The work is part of a revolution in fire safety in which codes and standards are beginning to address how much smoke, or gases generated by thermal decomposition, will incapacitate people, rather than how much will kill them.

The jacketing and insulating materials used in duct cable and limited combustible cable are subject to heat decomposition and the emission of sub-lethal toxic fumes. Some of these fumes can incapacitate (blinding and choking) the building occupants. The requirements for using "duct cable" have failed to recognize toxicity or emissions that are essentially colorless (i.e. hydrogen fluoride, which converts to hydrofluoric acid upon contact with any moisture, and other toxic gases may be generated).

In 2002, the ISO (International Organization for Standardization), a network of the industrial-standards institutes of 147 countries, put forth a new standard calling for attention to the "sub-lethal" effects of smoke - when the heat, the thickness of smoke, and the toxic gases in smoke will block vision, make a person choke or tear up, or render a person unconscious. Because of this new ISO standard, these effects of smoke are supposed to be taken into account when regulating the size and placement of exits and the types of materials allowed in buildings. But to meet the standard, one needs to know more about the smoke produced by burning various materials. Working with the National Institute of Standards and Technology, the FPRF is laying the scientific groundwork needed to put the new standard into practice. The foundation recently completed the project's second phase of its International study of the Sub-lethal Effects of Fire Smoke on Survivability and Health. In the most recent phase of the study, the foundation's researchers performed three tests: They burned a sofa made of upholstered cushions on a steel frame, some particle board bookcases, and some household cable. In each case, the materials were burned in a room with a long adjacent corridor. The researchers measured the toxic gases emitted by each item, and how quickly the gases filled the room and moved down the corridor. They determined when and where in the room and in the hallway people would have to stop because of the smoke or the heat. Fire-test laboratories and manufacturers are expected to use this data to develop smaller-scale tests that can be done in a laboratory, so they won't need to set a room on fire every time they test a product. FPRF is uniquely equipped to conduct such studies, and NFPA officials expect more lives to be saved because of the new fire-safety standards that will emerge from this work.

By allowing and specifying the use of "duct cable," this proposal supports the use of materials counter to the findings already available in the public domain regarding sub-lethal toxicity of hydrogen fluoride and through the NFPA Fire Protection Research Foundation regarding incapacitation factors. Polymers used in duct cable and other limited combustible cable materials far exceed the incapacitation factor of other materials used in various cable construction both in generation of sub-lethal constituents and in hypertoxicity.

Panel Meeting Action: Accept

Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:

"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."

This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.

Number Eligible to Vote: 15

Ballot Results: Affirmative: 13 Abstain: 2

Comment on Affirmative:

OHDE: See my Affirmative Comment for Comment 16-34.

Explanation of Abstention:

DORNA: See my Explanation of Abstention for Comment 16-34.

KAHN: See my Explanation of Abstention on Comment 16-34.

16-705 Log #2268 NEC-P16 **Final Action: Accept**
(820.50, 820.51 and 820.53)

Note: See the Technical Correlating Committee Note on Comment 16-701.

Submitter: Frank Bisbee, Communication Planning Corporation

Comment on Proposal No: 16-168

Recommendation: Reject this proposal.

Substantiation: In recognizing the use of "duct cable" or "limited combustible cable," the proposal fails to consider toxicity of the newly specified product and the relative incapacitation factor presented by the chemical constituents of the polymer in new cable design. A recent study by the NFPA Fire Protection Research Foundation has advanced an international effort to make certain that people can escape a burning building before being incapacitated (overcome by smoke or gases generated by thermal decomposition). The work is part of a revolution in fire safety in which codes and standards are beginning to address how much smoke, or gases generated by thermal decomposition, will incapacitate people, rather than how much will kill them.

The jacketing and insulating materials used in duct cable and limited combustible cable are subject to heat decomposition and the emission of sub-lethal toxic fumes. Some of these fumes can incapacitate (blinding and choking) the building occupants. The requirements for using "duct cable" have failed to recognize toxicity or emissions that are essentially colorless (i.e. hydrogen fluoride, which converts to hydrofluoric acid upon contact with any moisture, and other toxic gases may be generated).

In 2002, the ISO (International Organization for Standardization), a network of the industrial-standards institutes of 147 countries, put forth a new standard calling for attention to the "sub-lethal" effects of smoke - when the heat, the thickness of smoke, and the toxic gases in smoke will block vision, make a person choke or tear up, or render a person unconscious. Because of this new ISO standard, these effects of smoke are supposed to be taken into account when regulating the size and placement of exits and the types of materials allowed in buildings. But to meet the standard, one needs to know more about the smoke produced by burning various materials. Working with the National Institute of Standards and Technology, the FPRF is laying the scientific groundwork needed to put the new standard into practice. The foundation recently completed the project's second phase of its International study of the Sub-lethal Effects of Fire Smoke on Survivability and Health. In the most recent phase of the study, the foundation's researchers performed three tests: They burned a sofa made of upholstered cushions on a steel frame, some particle board bookcases, and some household cable. In each case, the materials were burned in a room with a long adjacent corridor. The researchers measured the toxic gases emitted by each item, and how quickly the gases filled the room and moved down the corridor. They determined when and where in the room and in the hallway people would have to stop because of the smoke or the heat. Fire-test laboratories and manufacturers are expected to use this data to develop smaller-scale tests that can be done in a laboratory, so they won't need to set a room on fire every time they test a product. FPRF is uniquely equipped to conduct such studies, and NFPA officials expect more lives to be saved because of the new fire-safety standards that will emerge from this work.

By allowing and specifying the use of "duct cable," this proposal supports the use of materials counter to the findings already available in the public domain regarding sub-lethal toxicity of hydrogen fluoride and through the NFPA Fire Protection Research Foundation regarding incapacitation factors. Polymers used in duct cable and other limited combustible cable materials far exceed the incapacitation factor of other materials used in various cable construction both in generation of sub-lethal constituents and in hypertoxicity.

Panel Meeting Action: Accept

Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:

"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."

This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.

Number Eligible to Vote: 15

Ballot Results: Affirmative: 13 Abstain: 2

Comment on Affirmative:

OHDE: See my Affirmative Comment for Comment 16-34.

Explanation of Abstention:

DORNA: See my Explanation of Abstention for Comment 16-34.

KAHN: See my Explanation of Abstention on Comment 16-34.

16-706 Log #2308 NEC-P16 **Final Action: Accept**
(820.50, 820.51 and 820.53)

Note: See the Technical Correlating Committee Note on Comment 16-701.

Submitter: Frank Bisbee, Communication Planning Corporation

Comment on Proposal No: 16-181

Recommendation: Reject this proposal.

Substantiation: In recognizing the use of "duct cable" or "limited combustible cable," the proposal fails to consider toxicity of the newly specified product and the relative incapacitation factor presented by the chemical constituents of the polymer in new cable design. A recent study by the NFPA Fire Protection Research Foundation has advanced an international effort to make certain that people can escape a burning building before being incapacitated (overcome by smoke or gases generated by thermal decomposition). The work is part of a revolution in fire safety in which codes and standards are beginning to address how much smoke, or gases generated by thermal decomposition, will incapacitate people, rather than how much will kill them.

The jacketing and insulating materials used in duct cable and limited combustible cable are subject to heat decomposition and the emission of sub-lethal toxic fumes. Some of these fumes can incapacitate (blinding and choking) the building occupants. The requirements for using "duct cable" have failed to recognize toxicity or emissions that are essentially colorless (i.e. hydrogen fluoride, which converts to hydrofluoric acid upon contact with any moisture, and other toxic gases may be generated).

In 2002, the ISO (International Organization for Standardization), a network of the industrial-standards institutes of 147 countries, put forth a new standard calling for attention to the "sub-lethal" effects of smoke - when the heat, the thickness of smoke, and the toxic gases in smoke will block vision, make a person choke or tear up, or render a person unconscious. Because of this new ISO standard, these effects of smoke are supposed to be taken into account when regulating the size and placement of exits and the types of materials allowed in buildings. But to meet the standard, one needs to know more about the smoke produced by burning various materials. Working with the National Institute of Standards and Technology, the FPRF is laying the scientific groundwork needed to put the new standard into practice. The foundation recently completed the project's second phase of its International study of the Sub-lethal Effects of Fire Smoke on Survivability and Health. In the most recent phase of the study, the foundation's researchers performed three tests: They burned a sofa made of upholstered cushions on a steel frame, some particle board bookcases, and some household cable. In each case, the materials were burned in a room with a long adjacent corridor. The researchers measured the toxic gases emitted by each item, and how quickly the gases filled the room and moved down the corridor. They determined when and where in the room and in the hallway people would have to stop because of the smoke or the heat. Fire-test laboratories and manufacturers are expected to use this data to develop smaller-scale tests that can be done in a laboratory, so they won't need to set a room on fire every time they test a product. FPRF is uniquely equipped to conduct such studies, and NFPA officials expect more lives to be saved because of the new fire-safety standards that will emerge from this work.

By allowing and specifying the use of "duct cable," this proposal supports the use of materials counter to the findings already available in the public domain regarding sub-lethal toxicity of hydrogen fluoride and through the NFPA Fire Protection Research Foundation regarding incapacitation factors. Polymers used in duct cable and other limited combustible cable materials far exceed the incapacitation factor of other materials used in various cable construction both in generation of sub-lethal constituents and in hypertoxicity.

Panel Meeting Action: Accept

Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:

"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."

This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.

Number Eligible to Vote: 15

Ballot Results: Affirmative: 13 Abstain: 2

Comment on Affirmative:

OHDE: See my Affirmative Comment for Comment 16-34.

Explanation of Abstention:

DORNA: See my Explanation of Abstention for Comment 16-34.

KAHN: See my Explanation of Abstention on Comment 16-34.

16-707 Log #2309 NEC-P16 **Final Action: Accept**
(820.50, 820.51 and 820.53)

Note: See the Technical Correlating Committee Note on Comment 16-701.

Submitter: Frank Bisbee, Communication Planning Corporation

Comment on Proposal No: 16-184

Recommendation: Reject this proposal.

Substantiation: In recognizing the use of "duct cable" or "limited combustible cable," the proposal fails to consider toxicity of the newly specified product and the relative incapacitation factor presented by the chemical constituents of the polymer in new cable design. A recent study by the NFPA Fire Protection Research Foundation has advanced an international effort to make certain that people can escape a burning building before being incapacitated (overcome by smoke or gases generated by thermal decomposition). The work is part of a revolution in fire safety in which codes and standards are beginning to address how much smoke, or gases generated by thermal decomposition, will incapacitate people, rather than how much will kill them.

The jacketing and insulating materials used in duct cable and limited combustible cable are subject to heat decomposition and the emission of sub-lethal toxic fumes. Some of these fumes can incapacitate (blinding and choking) the building occupants. The requirements for using "duct cable" have failed to recognize toxicity or emissions that are essentially colorless (i.e. hydrogen fluoride, which converts to hydrofluoric acid upon contact with any moisture, and other toxic gases may be generated).

In 2002, the ISO (International Organization for Standardization), a network of the industrial-standards institutes of 147 countries, put forth a new standard calling for attention to the "sub-lethal" effects of smoke - when the heat, the thickness of smoke, and the toxic gases in smoke will block vision, make a person choke or tear up, or render a person unconscious. Because of this new

ISO standard, these effects of smoke are supposed to be taken into account when regulating the size and placement of exits and the types of materials allowed in buildings. But to meet the standard, one needs to know more about the smoke produced by burning various materials. Working with the National Institute of Standards and Technology, the FPRF is laying the scientific groundwork needed to put the new standard into practice. The foundation recently completed the project's second phase of its International study of the Sub-lethal Effects of Fire Smoke on Survivability and Health. In the most recent phase of the study, the foundation's researchers performed three tests: They burned a sofa made of upholstered cushions on a steel frame, some particle board bookcases, and some household cable. In each case, the materials were burned in a room with a long adjacent corridor. The researchers measured the toxic gases emitted by each item, and how quickly the gases filled the room and moved down the corridor. They determined when and where in the room and in the hallway people would have to stop because of the smoke or the heat. Fire-test laboratories and manufacturers are expected to use this data to develop smaller-scale tests that can be done in a laboratory, so they won't need to set a room on fire every time they test a product. FPRF is uniquely equipped to conduct such studies, and NFPA officials expect more lives to be saved because of the new fire-safety standards that will emerge from this work.

By allowing and specifying the use of "duct cable," this proposal supports the use of materials counter to the findings already available in the public domain regarding sub-lethal toxicity of hydrogen fluoride and through the NFPA Fire Protection Research Foundation regarding incapacitation factors. Polymers used in duct cable and other limited combustible cable materials far exceed the incapacitation factor of other materials used in various cable construction both in generation of sub-lethal constituents and in hypertoxicity.

Panel Meeting Action: Accept

Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:

"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."

This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.

Number Eligible to Vote: 15

Ballot Results: Affirmative: 13 Abstain: 2

Comment on Affirmative:

OHDE: See my Affirmative Comment for Comment 16-34.

Explanation of Abstention:

DORNA: See my Explanation of Abstention for Comment 16-34.

KAHN: See my Explanation of Abstention on Comment 16-34.

16-708 Log #2310 NEC-P16 **Final Action: Accept**
(820.50, 820.51 and 820.53)

Note: See the Technical Correlating Committee Note on Comment 16-701.

Submitter: Frank Bisbee, Communication Planning Corporation

Comment on Proposal No: 16-182

Recommendation: Reject this proposal.

Substantiation: In recognizing the use of "duct cable" or "limited combustible cable," the proposal fails to consider toxicity of the newly specified product and the relative incapacitation factor presented by the chemical constituents of the polymer in new cable design. A recent study by the NFPA Fire Protection Research Foundation has advanced an international effort to make certain that people can escape a burning building before being incapacitated (overcome by smoke or gases generated by thermal decomposition). The work is part of a revolution in fire safety in which codes and standards are beginning to address how much smoke, or gases generated by thermal decomposition, will incapacitate people, rather than how much will kill them.

The jacketing and insulating materials used in duct cable and limited combustible cable are subject to heat decomposition and the emission of sub-lethal toxic fumes. Some of these fumes can incapacitate (blinding and choking) the building occupants. The requirements for using "duct cable" have failed to recognize toxicity or emissions that are essentially colorless (i.e. hydrogen fluoride, which converts to hydrofluoric acid upon contact with any moisture, and other toxic gases may be generated).

In 2002, the ISO (International Organization for Standardization), a network of the industrial-standards institutes of 147 countries, put forth a new standard calling for attention to the "sub-lethal" effects of smoke - when the heat, the thickness of smoke, and the toxic gases in smoke will block vision, make a person choke or tear up, or render a person unconscious. Because of this new ISO standard, these effects of smoke are supposed to be taken into account when regulating the size and placement of exits and the types of materials allowed in buildings. But to meet the standard, one needs to know more about the smoke produced by burning various materials. Working with the National Institute of Standards and Technology, the FPRF is laying the scientific groundwork needed to put the new standard into practice. The foundation recently completed the project's second phase of its International study of the Sub-lethal Effects of Fire Smoke on Survivability and Health. In the most recent phase of the study, the foundation's researchers performed three tests: They burned a sofa made of upholstered cushions on a steel frame, some particle board bookcases, and some household cable. In each case, the materials were burned in a room with a long adjacent corridor. The researchers measured the toxic gases emitted by each item, and how quickly the gases filled the room and moved down the corridor. They determined when and where in the room and in the hallway people would have to stop because of the smoke or the heat. Fire-test laboratories and manufacturers are expected to use this data to develop smaller-scale tests that can be done in a laboratory, so they won't need to set a room on fire every time they test a product. FPRF is uniquely equipped to conduct such studies, and NFPA officials expect more lives to be saved because of the new fire-safety standards that will emerge from this work.

By allowing and specifying the use of "duct cable," this proposal supports the use of materials counter to the findings already available in the public domain regarding sub-lethal toxicity of hydrogen fluoride and through the NFPA Fire Protection Research Foundation regarding incapacitation factors. Polymers used in duct cable and other limited combustible cable materials far exceed the incapacitation factor of other materials used in various cable construction both in generation of sub-lethal constituents and in hypertoxicity.

Panel Meeting Action: Accept

Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:

"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."

This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.

Number Eligible to Vote: 15

Ballot Results: Affirmative: 13 Abstain: 2

Comment on Affirmative:

OHDE: See my Affirmative Comment for Comment 16-34.

Explanation of Abstention:

DORNA: See my Explanation of Abstention for Comment 16-34.

KAHN: See my Explanation of Abstention on Comment 16-34.

16-709 Log #2312 NEC-P16 **Final Action: Accept**
(820-50, 820.51, and 820.53)

Note: See the Technical Correlating Committee Note on Comment 16-701.

Submitter: Frank Bisbee, Communication Planning Corporation

Comment on Proposal No: 16-183

Recommendation: Reject this proposal.

Substantiation: In recognizing the use of "duct cable" or "limited combustible cable," the proposal fails to consider toxicity of the newly specified product and the relative incapacitation factor presented by the chemical constituents of the polymer in new cable design. A recent study by the NFPA Fire Protection Research Foundation has advanced an international effort to make certain that people can escape a burning building before being incapacitated (overcome by smoke or gases generated by thermal decomposition). The work is part of a revolution in fire safety in which codes and standards are beginning to address how much smoke, or gases generated by thermal decomposition, will incapacitate people, rather than how much will kill them.

The jacketing and insulating materials used in duct cable and limited combustible cable are subject to heat decomposition and the emission of sub-lethal toxic fumes. Some of these fumes can incapacitate (blinding and choking) the building occupants. The requirements for using "duct cable" have failed to recognize toxicity or emissions that are essentially colorless (i.e. hydrogen fluoride, which converts to hydrofluoric acid upon contact with any moisture, and other toxic gases may be generated).

In 2002, the ISO (International Organization for Standardization), a network of the industrial-standards institutes of 147 countries, put forth a new standard calling for attention to the "sub-lethal" effects of smoke - when the heat, the thickness of smoke, and the toxic gases in smoke will block vision, make a person choke or tear up, or render a person unconscious. Because of this new ISO standard, these effects of smoke are supposed to be taken into account when regulating the size and placement of exits and the types of materials allowed in buildings. But to meet the standard, one needs to know more about the smoke produced by burning various materials. Working with the National Institute of Standards and Technology, the FPRF is laying the

scientific groundwork needed to put the new standard into practice. The foundation recently completed the project's second phase of its International study of the Sub-lethal Effects of Fire Smoke on Survivability and Health. In the most recent phase of the study, the foundation's researchers performed three tests: They burned a sofa made of upholstered cushions on a steel frame, some particle board bookcases, and some household cable. In each case, the materials were burned in a room with a long adjacent corridor. The researchers measured the toxic gases emitted by each item, and how quickly the gases filled the room and moved down the corridor. They determined when and where in the room and in the hallway people would have to stop because of the smoke or the heat. Fire-test laboratories and manufacturers are expected to use this data to develop smaller-scale tests that can be done in a laboratory, so they won't need to set a room on fire every time they test a product. FPRF is uniquely equipped to conduct such studies, and NFPA officials expect more lives to be saved because of the new fire-safety standards that will emerge from this work.

By allowing and specifying the use of "duct cable," this proposal supports the use of materials counter to the findings already available in the public domain regarding sub-lethal toxicity of hydrogen fluoride and through the NFPA Fire Protection Research Foundation regarding incapacitation factors. Polymers used in duct cable and other limited combustible cable materials far exceed the incapacitation factor of other materials used in various cable construction both in generation of sub-lethal constituents and in hypertoxicity.

Panel Meeting Action: Accept

Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:

"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."

This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.

Number Eligible to Vote: 15

Ballot Results: Affirmative: 13 Abstain: 2

Comment on Affirmative:

OHDE: See my Affirmative Comment for Comment 16-34.

Explanation of Abstention:

DORNA: See my Explanation of Abstention for Comment 16-34.

KAHN: See my Explanation of Abstention on Comment 16-34.

16-710 Log #2347 NEC-P16 **Final Action: Accept**
(820.50, 820.51 and 820.53)

Note: See the Technical Correlating Committee Note on Comment 16-701.

Submitter: Frank Bisbee, Communication Planning Corporation

Comment on Proposal No: 16-179

Recommendation: Reject this proposal.

Substantiation: In recognizing the use of "duct cable" or "limited combustible cable," the proposal fails to consider toxicity of the newly specified product and the relative incapacitation factor presented by the chemical constituents of the polymer in new cable design. A recent study by the NFPA Fire Protection Research Foundation has advanced an international effort to make certain that people can escape a burning building before being incapacitated (overcome by smoke or gases generated by thermal decomposition). The work is part of a revolution in fire safety in which codes and standards are beginning to address how much smoke, or gases generated by thermal decomposition, will incapacitate people, rather than how much will kill them.

The jacketing and insulating materials used in duct cable and limited combustible cable are subject to heat decomposition and the emission of sub-lethal toxic fumes. Some of these fumes can incapacitate (blinding and choking) the building occupants. The requirements for using "duct cable" have failed to recognize toxicity or emissions that are essentially colorless (i.e. hydrogen fluoride, which converts to hydrofluoric acid upon contact with any moisture, and other toxic gases may be generated).

In 2002, the ISO (International Organization for Standardization), a network of the industrial-standards institutes of 147 countries, put forth a new standard calling for attention to the "sub-lethal" effects of smoke - when the heat, the thickness of smoke, and the toxic gases in smoke will block vision, make a person choke or tear up, or render a person unconscious. Because of this new ISO standard, these effects of smoke are supposed to be taken into account when regulating the size and placement of exits and the types of materials allowed in buildings. But to meet the standard, one needs to know more about the smoke produced by burning various materials. Working with the National Institute of Standards and Technology, the FPRF is laying the scientific groundwork needed to put the new standard into practice. The foundation recently completed the project's second phase of its International study of the Sub-lethal Effects of Fire Smoke on Survivability and Health. In the most recent phase of the study, the foundation's researchers performed three tests: They burned a sofa made of upholstered cushions on a steel frame, some particle board bookcases, and some household cable. In each case, the materials were burned in a room with a long adjacent corridor. The researchers measured the toxic gases emitted by each item, and how quickly the gases filled the room and moved down the corridor. They determined when and where in the room and in the hallway people would have to stop because of the smoke or the heat. Fire-test laboratories and manufacturers are expected to use this data to develop smaller-scale tests that can be done in a laboratory, so they won't need to set a room on fire every time they test a product. FPRF is uniquely equipped to conduct such studies, and NFPA officials expect more lives to be saved because of the new fire-safety standards that will emerge from this work.

By allowing and specifying the use of "duct cable," this proposal supports the use of materials counter to the findings already available in the public domain regarding sub-lethal toxicity of hydrogen fluoride and through the NFPA Fire Protection Research Foundation regarding incapacitation factors. Polymers used in duct cable and other limited combustible cable materials far exceed the incapacitation factor of other materials used in various cable construction both in generation of sub-lethal constituents and in hypertoxicity.

Panel Meeting Action: Accept

Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:

"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."

This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.

Number Eligible to Vote: 15

Ballot Results: Affirmative: 13 Abstain: 2

Comment on Affirmative:

OHDE: See my Affirmative Comment for Comment 16-34.

Explanation of Abstention:

DORNA: See my Explanation of Abstention for Comment 16-34.

KAHN: See my Explanation of Abstention on Comment 16-34.

16-711 Log #2836 NEC-P16 **Final Action: Accept**
(820.50, 820.51 and 820.53)

Note: See the Technical Correlating Committee Note on Comment 16-701.

Submitter: Frank Bisbee, Communication Planning Corporation

Comment on Proposal No: 16-178

Recommendation: Reject this proposal.

Substantiation: In recognizing the use of "duct cable" or "limited combustible cable," the proposal fails to consider toxicity of the newly specified product and the relative incapacitation factor presented by the chemical constituents of the polymer in new cable design. A recent study by the NFPA Fire Protection Research Foundation has advanced an international effort to make certain that people can escape a burning building before being incapacitated (overcome by smoke or gases generated by thermal decomposition). The work is part of a revolution in fire safety in which codes and standards are beginning to address how much smoke, or gases generated by thermal decomposition, will incapacitate people, rather than how much will kill them.

The jacketing and insulating materials used in duct cable and limited combustible cable are subject to heat decomposition and the emission of sub-lethal toxic fumes. Some of these fumes can incapacitate (blinding and choking) the building occupants. The requirements for using "duct cable" have failed to recognize toxicity or emissions that are essentially colorless (i.e. hydrogen fluoride, which converts to hydrofluoric acid upon contact with any moisture, and other toxic gases may be generated).

In 2002, the ISO (International Organization for Standardization), a network of the industrial-standards institutes of 147 countries, put forth a new standard calling for attention to the "sub-lethal" effects of smoke - when the heat, the thickness of smoke and the toxic gases in smoke will block vision, make a person choke or tear up, or render a person unconscious. Because of this new ISO standard, these effects of smoke are supposed to be taken into account when regulating the size and placement of exits and the types of materials allowed in buildings. But to meet the standard, one needs to know more about the smoke produced by burning various materials. Working with the National Institute of Standards and Technology, the FPRF is laying the scientific groundwork needed to put the new standard into practice. The foundation recently completed the project's second phase of its International Study of the Sub-lethal Effects of Fire Smoke on Survivability and Health. In the most recent phase of the study, the foundations researchers performed three tests: They burned a sofa made of upholstered cushions on a steel frame,

some particle board bookcases, and some household cable. In each case, the materials were burned in a room with a long adjacent corridor. The researchers measured the toxic gases emitted by each item, and how quickly the gases filled the room and moved down the corridor. They determined when and where in the room and in the hallway people would have to stop because of the smoke or the heat. Fire-test laboratories and manufacturers are expected to use this data to develop smaller-scale tests that can be done in a laboratory, so they won't need to set a room on fire every time they test a product. FPRF is uniquely equipped to conduct such studies, and NFPA officials expect more lives to be saved because of the new fire-safety standards that will emerge from this work.

By allowing and specifying the use of "duct cable," this proposal supports the use of materials counter to the findings already available in the public domain regarding sub-lethal toxicity of hydrogen fluoride and through the NFPA Fire Protection Research Foundation regarding incapacitation factors. Polymers used in duct cable and other limited combustible cable materials far exceed the incapacitation factor of other materials used in various cable construction both in generation of sub-lethal constituents and in hypertoxicity.

Panel Meeting Action: Accept

Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:

"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."

This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.

Number Eligible to Vote: 15

Ballot Results: Affirmative: 13 Abstain: 2

Comment on Affirmative:

OHDE: See my Affirmative Comment for Comment 16-34.

Explanation of Abstention:

DORNA: See my Explanation of Abstention for Comment 16-34.

KAHN: See my Explanation of Abstention on Comment 16-34.

16-712 Log #325 NEC-P16 **Final Action: Reject**
(Table 820.50, 820.53, Table 820.53)

Submitter: Technical Committee on Air Conditioning

Comment on Proposal No: 16-196

Recommendation: Continue to accept this proposal in principle.

Substantiation: See the comment from the Technical committee on Air Conditioning on proposal 16-177.

Panel Meeting Action: Reject

Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:

"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."

This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.

Number Eligible to Vote: 15

Ballot Results: Affirmative: 13 Abstain: 2

Comment on Affirmative:

OHDE: See my Affirmative Comment for Comment 16-34.

Explanation of Abstention:

DORNA: See my Explanation of Abstention for Comment 16-34.

KAHN: See my Explanation of Abstention on Comment 16-34.

16-713 Log #2771 NEC-P16 **Final Action: Reject**
(Table 820.50, 820.53, Table 820.53)

Submitter: Richard Fransen, Daikin America, Inc. / Rep. Cable Fire Research Association

Comment on Proposal No: 16-196

Recommendation: Continue to accept this proposal in principle.

Substantiation: See the comment from CFRA on proposal 16-177.

Panel Meeting Action: Reject

Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:

"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."

This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.

Number Eligible to Vote: 15

Ballot Results: Affirmative: 13 Abstain: 2

Comment on Affirmative:

OHDE: See my Affirmative Comment for Comment 16-34.

Explanation of Abstention:

DORNA: See my Explanation of Abstention for Comment 16-34.

KAHN: See my Explanation of Abstention on Comment 16-34.

16-714 Log #1462 NEC-P16 **Final Action: Accept in Principle**
(820.50 Exception No. 3)

Submitter: Technical Correlating Committee on Signaling Systems for the Protection of Life and Property

Comment on Proposal No: 16-170

Recommendation: Continue to accept.

Substantiation: The Signaling Systems for the Protection of Life and Property TCC agrees that unlisted outside plant cables should not be permitted in air ducts, risers or any type of plenum because of the increased fire hazard these non-fire-resistant cables create. Permitting these cables in air ducts or any type of plenum is a violation of NFPA 90A, *Standard for the Installation of Air-Conditioning and Ventilating Systems*.

Panel Meeting Action: Accept in Principle

Panel Statement: See panel action and statement on Comment 16-674.

Number Eligible to Vote: 15

Ballot Results: Affirmative: 13 Negative: 2

Explanation of Negative:

JENSEN: Delete the term "air duct" in the Panel meeting action of Exception No. 1. Air ducts are not defined and this comment goes against Standards Council Decision 03-10-25. OHDE: See my Explanation of Negative vote on Comment 16-674.

16-715 Log #1502 NEC-P16 **Final Action: Accept in Principle**
(820.50 Exception No. 3)

Submitter: Marcelo M. Hirschler, GBH International / Rep. Fire Retardant Chemicals

Comment on Proposal No: 16-167

Recommendation: 800.50 Exception No. 3:

Exception No. 1: Unlisted outside plant communications cables shall be permitted within buildings in spaces other than risers, ducts, plenums and other air-handling spaces (as described in Section 300.22), ~~air ducts, ceiling cavity plenums, raised floor plenums, duct distribution plenums, apparatus casing plenums, and air-handling unit room plenums~~ where the length of unlisted communications cable within the building, measured from its point of entrance, does not exceed 15 m (50 ft) and the unlisted outside plant communications cable enters the building from the outside and is terminated in an enclosure.

Substantiation: The language in this exception should refer to the sections of the code as described in Article 300, since there is no need to introduce these new designations of subdivisions of plenum spaces. The creation of these new subdivisions should not be accepted. The terminology in NEC 2002 is correct and needs no change.

See also the substantiation for my comments on proposal 16-59.

Panel Meeting Action: Accept in Principle

Panel Statement: See panel action and statement on Comment 16-674. See panel action and panel statement on comment 16-674 which is editorially similar and accomplishes the submitter's purpose.

Number Eligible to Vote: 15

Ballot Results: Affirmative: 14 Negative: 1

Explanation of Negative:

OHDE: I am voting negative on both the panel action and panel statement. The comment should have been accepted as written. The panel action for Comment 16-674 is not editorially similar nor does it accomplish the submitter's intent. The submitter submitted the following language: ...duct, plenums and other air handling spaces (as described in Section 300.22... The revised Section 820.50 Exception No. 3 as stated in Comment 16-674 uses

the term "air duct". The original source of the definition of "air duct" was the NFPA 90A -2002 Standard and acceptance of this definition would be in violation of Standards Council Decision 03-10-25. As a last minute ditch effort, the definition of "air duct" was retained because it appeared in another NFPA document. The defintion of "air duct" is an extract from NFPA 97-2003.

16-716 Log #1503 NEC-P16 **Final Action: Accept in Principle**
(820.50 Exception No. 3)

Submitter: Marcelo M. Hirschler, GBH International / Rep. Fire Retardant Chemicals
Comment on Proposal No: 16-169
Recommendation: 820.50 Exception No. 3:
Exception No. 1: Unlisted outside plant coaxial cables shall be permitted within buildings in spaces other than risers, ducts, plenums and other air-handling spaces (as described in Section 300.22), ~~air ducts, ceiling cavity plenums, raised floor plenums, duct distribution plenums, apparatus casing plenums, and air-handling unit room plenums~~ where the length of unlisted coaxial cable within the building, measured from its point of entrance, does not exceed 15 m (50 ft) and the unlisted outside plant coaxial cable enters the building from the outside and is terminated in an enclosure.
Substantiation: The language in this exception should refer to the sections of the code as described in Article 300, since there is no need to introduce these new designations of subdivisions of plenum spaces. The creation of these new subdivisions should not be accepted. The terminology in NEC 2002 is correct and needs no change.
See also the substantiation for my comments on proposal 16-59.
Panel Meeting Action: Accept in Principle
Panel Statement: See panel action and statement on Comment 16-674. See panel action and panel statement on comment 16-674 which is editorially similar and accomplishes the submitter's purpose.
Number Eligible to Vote: 15
Ballot Results: Affirmative: 14 Negative: 1
Explanation of Negative:
OHDE: See my Explanation of Negative vote on Comment 16-715.

16-717 Log #1504 NEC-P16 **Final Action: Accept in Principle**
(820.50 Exception No. 3)

Submitter: Marcelo M. Hirschler, GBH International / Rep. Fire Retardant Chemicals
Comment on Proposal No: 16-170
Recommendation: 820.50 Exception No. 3: Exception No. 1: Unlisted outside plant coaxial cables shall be permitted within buildings in spaces other than risers, ducts, plenums and other air-handling spaces (as described in Section 300.22), ~~air ducts, ceiling cavity plenums, raised floor plenums, duct distribution plenums, apparatus casing plenums, and air-handling unit room plenums~~ where the length of unlisted coaxial cable within the building, measured from its point of entrance, does not exceed 15 m (50 ft) and the unlisted outside plant coaxial cable enters the building from the outside and is terminated in an enclosure.
Substantiation: The language in this exception should refer to the sections of the code as described in Article 300, since there is no need to introduce these new designations of subdivisions of plenum spaces. The creation of these new subdivisions should not be accepted. The terminology in NEC 2002 is correct and needs no change.
See also the substantiation for my comments on proposal 16-59.
Panel Meeting Action: Accept in Principle
Panel Statement: See panel action and statement on Comment 16-674. See panel action and panel statement on comment 16-674 which is editorially similar and accomplishes the submitter's purpose.
Number Eligible to Vote: 15
Ballot Results: Affirmative: 14 Negative: 1
Explanation of Negative:
OHDE: See my Explanation of Negative vote on Comment 16-715.

16-718 Log #1505 NEC-P16 **Final Action: Accept in Principle**
(820.50 Exception No. 3)

Submitter: Marcelo M. Hirschler, GBH International / Rep. Fire Retardant Chemicals
Comment on Proposal No: 16-170
Recommendation: 820.50 Exception No. 3: Exception No. 1: Unlisted outside plant coaxial cables shall be permitted within buildings in spaces other than risers, ducts, plenums and other air-handling spaces (as described in Section 300.22), ~~air ducts, ceiling cavity plenums, raised floor plenums, duct distribution plenums, apparatus casing plenums, and air-handling unit room plenums~~ where the length of unlisted coaxial cable within the building, measured from its point of entrance, does not exceed 15 m (50 ft) and the unlisted outside plant coaxial cable enters the building from the outside and is terminated in an enclosure.
Substantiation: The language in this exception should refer to the sections of the code as described in Article 300, since there is no need to introduce these new designations of subdivisions of plenum spaces. The creation of these new subdivisions should not be accepted. The terminology in NEC 2002 is correct and needs no change.
See also the substantiation for my comments on proposal 16-59.
Panel Meeting Action: Accept in Principle
Panel Statement: See panel action and statement on Comment 16-674. See panel action and panel statement on comment 16-674 which is editorially similar and accomplishes the submitter's purpose.
Number Eligible to Vote: 15
Ballot Results: Affirmative: 14 Negative: 1
Explanation of Negative:
OHDE: See my Explanation of Negative vote on Comment 16-715.

16-719 Log #1824 NEC-P16 **Final Action: Accept in Principle**
(820.50 Exception No. 3)

Submitter: Thomas P. Hammerberg, Automatic Fire Alarm Association
Comment on Proposal No: 16-170
Recommendation: Continue to accept.
Substantiation: The Automatic Fire Alarm Association agrees that unlisted outside plant cables should not be permitted in air ducts, risers or any type of plenum because of the increased fire hazard these non-fire-resistant cables create. Permitting these cables in air ducts or any type of plenum is a violation of NFPA 90A, Standard for the Installation of Air-Conditioning and Ventilating Systems.
Panel Meeting Action: Accept in Principle
Panel Statement: See panel action and statement on Comment 16-674.
Number Eligible to Vote: 15
Ballot Results: Affirmative: 13 Negative: 2
Explanation of Negative:
JENSEN: Delete the term "air duct" in the Panel meeting action of Exception No. 1. Air ducts are not defined and this comment goes against Standards Council Decision 03-10-25. OHDE: See my Explanation of Negative vote on Comment 16-674.

16-720 Log #2757 NEC-P16 **Final Action: Accept in Principle**
(820.50 Exception No. 3)

Submitter: Richard Fransen, Daikin America, Inc. / Rep. Cable Fire Research Association
Comment on Proposal No: 16-170
Recommendation: Continue to accept this proposal.
Substantiation: CFRA agrees that unlisted outside plant cables should not be permitted in air ducts, risers or any type of plenum. These cables are typically constructed with completely non-fire-resistant materials, usually polyethylene which is a high molecular weight paraffin that burns like candle wax. Furthermore, permitting these cables in air ducts or any type of plenum is a violation of NFPA 90A, Standard for the Installation of Air-Conditioning and Ventilating Systems.
Panel 16 accepted the definitions of air duct, ceiling cavity plenum, raised floor plenum, duct distribution plenum, apparatus casing plenum and air-handling unit room plenum its action on proposal 16-9.
Panel Meeting Action: Accept in Principle
Panel Statement: See panel action and statement on Comment 16-674.
Number Eligible to Vote: 15
Ballot Results: Affirmative: 13 Negative: 2
Explanation of Negative:
JENSEN: Delete the term "air duct" in the Panel meeting action of Exception No. 1. Air ducts are not defined and this comment goes against Standards Council Decision 03-10-25. OHDE: See my Explanation of Negative vote on Comment 16-674.

16-721 Log #3153 NEC-P16 **Final Action: Reject**
(820.50 Exception No. 3)

Submitter: Michael I. Callanan, IBEW
Comment on Proposal No: 16-166
Recommendation: This proposal should have been "Accept in Principle" with the following revised text for 820-50:
Exception No. 3: Unlisted outside plant coaxial cables shall be permitted where the length of the cable within the building, measured from its point of entrance, does not exceed 15 m (50 ft) and the cable enters the building from the outside and is terminated in an enclosure.
Substantiation: The submitter has submitted terms that has no positive effect on the National Electrical Code. These terms will add confusion and not clarity to an electrical code section that covers wiring in spaces that provide environmental air. The present language in the 2002 National Electrical Code Section 300.22(B) — Ducts or Plenums for Environmetnal Air and Section 300.22(C) — Other Space Used for Environemntal Air covers in great detail

which type of wiring methods should be used and implemented in these spaces. Code-Making Panel 3 which has the responsibility for 322 has not made any changes to this section in the 2005 ROP stage that would allow any changes to be permitted in these spaces (See Proposal 3-94 Panel Statement).

The terms air-handling unit room plenum, apparatus casing plenum, ceiling cavity plenum, duct distribution plenum and raised floor plenum as listed in the NFPA 90A standard-2002 are statements and cannot possibly be used as definitions. The submitter of this proposal has stated that the source for these - definitions is the NFPA 90A and yet the terms are used and identified differently in the NFPA 90A than in this proposal. There is too much confusion with these terms as to how they are identified in the NFPA 90A standard and the proposed 2005 ROP for the NEC. This is a definitie correlating problem that exists and will continue to do so until it is fixed.

Chapter 3 of the NFPA 90A, Standard for the Installation of Air Conditioning and Ventilating Systems, 2002 edition lists and identifies terminology that are officially recognized as Definitions to be used throughout the NFPA 90A standard. In regards to the following terms: air duct, air-handling unit room plenum, apparatus casing plenum, ceiling cavity plenum, duct distribution plenum, and raised floor plenum; only one of the terms is properly identified and listed as a definition. Under 3.3 General Definitions and more specifically 3.3.5—Air Duct. A conduit or passageway for conveying air to or from heating, cooling, air condtiioning, or ventilating equipment, but not including the plenum, cavity plenum, duct distribution plenum, and raised floor plenum, they are all lsited and identified in Chapter 4 of NFPA 90A standard under the heading of HVAC Systems. These 5 terms are listed and worded differently than those identical terms that are proposed in the 2005 ROP for the NEC. Here is a breakdown of the 5 terms as listed in the 2005 ROP and also NFPA 90A, 2002 standard.

Air — Handling Unit Room Plenum as listed in NFPA 90A standard 2002; 4.3.10.5.1-Individual rooms containing an air-handling unit(s) shall gather return air from various sources and combine the return air within the room for returning to the air-handling unit.

Air — Handling Unit Room Plenum as listed in the 2005 ROP for the NEC: An individual room containing an air-handling unit(s) used to gather return air from various sources and combine the return air within the room for returning to the air-handling unit.

Apparatus Casing Plenum as listed in NFPA 90A standard; 4.3.10.4.1-A fabricated plenum and apparatus casing shall be permitted to be used for supply, return, or exhaust air service.

Apparatus Casing Plenum as listed in the 2005 ROP for the NEC: A fabricated plenum and apparatus casing used for supply, return, or exhaust air service.

Ceiling Cavity Plenum as listed in NFPA 90A standard-2002; 4.3.10.2-The space between the top of the finished ceiling and the underside of the floor of the floor or roof above shall be permitted to be used to supply air to the occupied area, or return or exhaust air from the occupied area, provided that the conditions in 4.3.10.2.1 through 4.3.10.2.8 are met:

Ceiling Cavity Plenum as listed in the 2005 ROP for the NEC: The space between the top of the finished ceiling and the underside of the floor of the floor or roof above where used to supply air to the occupied area, or return or exhaust air from the occupied area.

Duct Distribution Plenum as listed in the NFPA 90A standard-2002; 4.3.10.3-A duct enclosure used for the multiple distribution or gathering of ducts or connectors shall be constructed of materials and methods specified in 4.3.1.

Duct Distribution Plenum as listed in the 2005 ROP for the NEC: A duct enclosure used for the multiple distribution or gathering of ducts or connectors.

Raised Floor Plenum as listed in the NFPA 90A standard-2002; 4.3.10.6.1-The space between the top of the finished floor and the underside of a raised floor shall be permitted to be used to supply air to the occupied area, or return or exhaust air from or return and exhaust air from the occupied area, provided that the conditions in 4.3.10.6.2 through 4.3.10.6.8 are met:

Raised Floor Plenum as listed in the 2005 ROP for the NEC: The space between the top of the finished floor and the underside of a raised floor where used to supply air to the occupied area, or return or exhaust air from or from the occupied area.

The terms air-handling unit room plenum, apparatus casing plenum, ceiling cavity plenum, duct distribution plenum and raised floor plenum as listed in the NFPA 90A standard-2002 are statements and cannot possibly be used as definitions. The submitter of this proposal has stated that the source for these definitions is the NFPA 90A and yet the terms are used and identified differently in the NFPA 90A than in this proposal. There is too much confusion with these terms as how they are identified in the NFPA 90A standard and the proposed 2005 ROP for the NEC. This is a definite correlating problem that exists and will continue to do so until it is fixed.

This comment represents the official position of the International Brotherhood of Electrical Workers Code and Standards Committee.

Panel Meeting Action: Reject

Panel Statement: The revised text accepted by the panel in its action on Comment 16-674 explicitly enumerates the places where entrance cable is prohibited. The text enumerates the prohibited spaces rather than referring a communications installer to the power wiring requirements in Section 300.22. As worded, the original comment would continue to allow unlisted outside plant cable in risers, which is not the panel's intent.

Number Eligible to Vote: 15

Ballot Results: Affirmative: 15

16-722 Log #3154 NEC-P16 **Final Action: Reject**
(820.50 Exception No. 3)

Submitter: Michael I. Callanan, IBEW

Comment on Proposal No: 16-167

Recommendation: This proposal should have been "Accept in Principle" with the following revised text for 820-50:

Exception No. 3: Unlisted outside plant coaxial cables shall be permitted where the length of the cable within the building, measured from its point of entrance, does not exceed 15 m (50 ft) and the cable enters the building from the outside and is terminated in an enclosure.

Substantiation: The submitter has submitted terms that has no positive effect on the National Electrical Code. These terms will add confusion and not clarity to an electrical code section that covers wiring in spaces that provide environmental air. The present language in the 2002 National Electrical Code Section 300.22(B) — Ducts or Plenums for Environmetnal Air and Section 300.22(C) — Other Space Used for Environemntal Air covers in great detail which type of wiring methods should be used and implemented in these spaces. Code-Making Panel 3 which has the responsibility for 322 has not made any changes to this section in the 2005 ROP stage that would allow any changes to be permitted in these spaces (See Proposal 3-94 Panel Statement).

The terms air-handling unit room plenum, apparatus casing plenum, ceiling cavity plenum, duct distribution plenum and raised floor plenum as listed in the NFPA 90A standard-2002 are statements and cannot possibly be used as definitions. The submitter of this proposal has stated that the source for these - definitions is the NFPA 90A and yet the terms are used and identified differently in the NFPA 90A than in this proposal. There is too much confusion with these terms as to how they are identified in the NFPA 90A standard and the proposed 2005 ROP for the NEC. This is a definitie correlating problem that exists and will continue to do so until it is fixed.

Chapter 3 of the NFPA 90A, Standard for the Installation of Air Conditioning and Ventilating Systems, 2002 edition lists and identifies terminology that are officially recognized as Definitions to be used throughout the NFPA 90A standard. In regards to the following terms: air duct, air-handling unit room plenum, apparatus casing plenum, ceiling cavity plenum, duct distribution plenum, and raised floor plenum; only one of the terms is properly identified and listed as a definition. Under 3.3 General Definitions and more specifically 3.3.5—Air Duct. A conduit or passageway for conveying air to or from heating, cooling, air condtiioning, or ventilating equipment, but not including the plenum, cavity plenum, duct distribution plenum, and raised floor plenum, they are all lsited and identified in Chapter 4 of NFPA 90A standard under the heading of HVAC Systems. These 5 terms are listed and worded differently than those identical terms that are proposed in the 2005 ROP for the NEC. Here is a breakdown of the 5 terms as listed in the 2005 ROP and also NFPA 90A, 2002 standard.

Air — Handling Unit Room Plenum as listed in NFPA 90A standard 2002; 4.3.10.5.1-Individual rooms containing an air-handling unit(s) shall gather return air from various sources and combine the return air within the room for returning to the air-handling unit.

Air — Handling Unit Room Plenum as listed in the 2005 ROP for the NEC: An individual room containing an air-handling unit(s) used to gather return air from various sources and combine the return air within the room for returning to the air-handling unit.

Apparatus Casing Plenum as listed in NFPA 90A standard; 4.3.10.4.1-A fabricated plenum and apparatus casing shall be permitted to be used for supply, return, or exhaust air service.

Apparatus Casing Plenum as listed in the 2005 ROP for the NEC: A fabricated plenum and apparatus casing used for supply, return, or exhaust air service.

Ceiling Cavity Plenum as listed in NFPA 90A standard-2002; 4.3.10.2-The space between the top of the finished ceiling and the underside of the floor of the floor or roof above shall be permitted to be used to supply air to the occupied area, or return or exhaust air from the occupied area, provided that the conditions in 4.3.10.2.1 through 4.3.10.2.8 are met:

Ceiling Cavity Plenum as listed in the 2005 ROP for the NEC: The space between the top of the finished ceiling and the underside of the floor of the floor or roof above where used to supply air to the occupied area, or return or exhaust air from the occupied area.

Duct Distribution Plenum as listed in the NFPA 90A standard-2002; 4.3.10.3-A duct enclosure used for the multiple distribution or gathering of ducts or connectors shall be constructed of materials and methods specified in 4.3.1.

Duct Distribution Plenum as listed in the 2005 ROP for the NEC: A duct enclosure used for the multiple distribution or gathering of ducts or connectors.

Raised Floor Plenum as listed in the NFPA 90A standard-2002; 4.3.10.6.1-The space between the top of the finished floor and the underside of a raised floor shall be permitted to be used to supply air to the occupied area, or return

or exhaust air from or return and exhaust air from the occupied area, provided that the conditions in 4.3.10.6.2 through 4.3.10.6.8 are met:

Raised Floor Plenum as listed in the 2005 ROP for the NEC: The space between the top of the finished floor and the underside of a raised floor where used to supply air to the occupied area, or return or exhaust air from or from the occupied area.

The terms air-handling unit room plenum, apparatus casing plenum, ceiling cavity plenum, duct distribution plenum and raised floor plenum as listed in the NFPA 90A standard-2002 are statements and cannot possibly be used as definitions. The submitter of this proposal has stated that the source for these definitions is the NFPA 90A and yet the terms are used and identified differently in the NFPA 90A than in this proposal. There is too much confusion with these terms as how they are identified in the NFPA 90A standard and the proposed 2005 ROP for the NEC. This is a definite correlating problem that exists and will continue to do so until it is fixed.

This comment represents the official position of the International Brotherhood of Electrical Workers Code and Standards Committee.

Panel Meeting Action: Reject

Panel Statement: The revised text accepted by the panel in its action on Comment 16-674 explicitly enumerates the places where entrance cable is prohibited. The text enumerates the prohibited spaces rather than referring a communications installer to the power wiring requirements in Section 300.22. As worded, the original comment would continue to allow unlisted outside plant cable in risers, which is not the panel's intent.

Number Eligible to Vote: 15

Ballot Results: Affirmative: 15

16-723 Log #3156 NEC-P16 **Final Action: Reject**
(820.50 Exception No. 3)

Submitter: Michael I. Callanan, IBEW

Comment on Proposal No: 16-169

Recommendation: This proposal should have been "Accept in Principle" with the following revised text for 820-50:

Exception No. 3: Unlisted outside plant coaxial cables shall be permitted where the length of the cable within the building, measured from its point of entrance, does not exceed 15 m (50 ft) and the cable enters the building from the outside and is terminated in an enclosure.

Substantiation: The submitter has submitted terms that has no positive effect on the National Electrical Code. These terms will add confusion and not clarity to an electrical code section that covers wiring in spaces that provide environmental air. The present language in the 2002 National Electrical Code Section 300.22(B) — Ducts or Plenums for Environmetnal Air and Section 300.22(C) — Other Space Used for Environemntal Air covers in great detail which type of wiring methods should be used and implemented in these spaces. Code-Making Panel 3 which has the responsibility for 322 has not made any changes to this section in the 2005 ROP stage that would allow any changes to be permitted in these spaces (See Proposal 3-94 Panel Statement).

The terms air-handling unit room plenum, apparatus casing plenum, ceiling cavity plenum, duct distribution plenum and raised floor plenum as listed in the NFPA 90A standard-2002 are statements and cannot possibly be used as definitions. The submitter of this proposal has stated that the source for these - definitions is the NFPA 90A and yet the terms are used and identified differently in the NFPA 90A than in this proposal. There is too much confusion with these terms as to how they are identified in the NFPA 90A standard and the proposed 2005 ROP for the NEC. This is a definitie correlating problem that exists and will continue to do so until it is fixed.

Chapter 3 of the NFPA 90A, Standard for the Installation of Air Conditioning and Ventilating Systems, 2002 edition lists and identifies terminology that are officially recognized as Definitions to be used throughout the NFPA 90A standard. In regards to the following terms: air duct, air-handling unit room plenum, apparatus casing plenum, ceiling cavity plenum, duct distribution plenum, and raised floor plenum; only one of the terms is properly identified and listed as a definition. Under 3.3 General Definitions and more specifically 3.3.5—Air Duct. A conduit or passageway for conveying air to or from heating, cooling, air condtiioning, or ventilating equipment, but not including the plenum, cavity plenum, duct distribution plenum, and raised floor plenum, they are all lsited and identified in Chapter 4 of NFPA 90A standard under the heading of HVAC Systems. These 5 terms are listed and worded differently than those identical terms that are proposed in the 2005 ROP for the NEC. Here is a breakdown of the 5 terms as listed in the 2005 ROP and also NFPA 90A, 2002 standard.

Air — Handling Unit Room Plenum as listed in NFPA 90A standard 2002; 4.3.10.5.1-Individual rooms containing an air-handling unit(s) shall gather return air from various sources and combine the return air within the room for returning to the air-handling unit.

Air — Handling Unit Room Plenum as listed in the 2005 ROP for the NEC: An individual room containing an air-handling unit(s) used to gather return air from various sources and combine the return air within the room for returning to the air-handling unit.

Apparatus Casing Plenum as listed in NFPA 90A standard; 4.3.10.4.1-A fabricated plenum and apparatus casing shall be permitted to be used for supply, return, or exhaust air service.

Apparatus Casing Plenum as listed in the 2005 ROP for the NEC: A fabricated plenum and apparatus casing used for supply, return, or exhaust air service.

Ceiling Cavity Plenum as listed in NFPA 90A standard-2002; 4.3.10.2-The space between the top of the finished ceiling and the underside of the floor of the floor or roof above shall be permitted to be used to supply air to the occupied area, or return or exhaust air from the occupied area, provided that the conditions in 4.3.10.2.1 through 4.3.10.2.8 are met:

Ceiling Cavity Plenum as listed in the 2005 ROP for the NEC: The space between the top of the finished ceiling and the underside of the floor of the floor or roof above where used to supply air to the occupied area, or return or exhaust air from the occupied area.

Duct Distribution Plenum as listed in the NFPA 90A standard-2002; 4.3.10.3-A duct enclosure used for the multiple distribution or gathering of ducts or connectors shall be constructed of materials and methods specified in 4.3.1.

Duct Distribution Plenum as listed in the 2005 ROP for the NEC: A duct enclosure used for the multiple distribution or gathering of ducts or connectors.

Raised Floor Plenum as listed in the NFPA 90A standard-2002; 4.3.10.6.1-The space between the top of the finished floor and the underside of a raised floor shall be permitted to be used to supply air to the occupied area, or return or exhaust air from or return and exhaust air from the occupied area, provided that the conditions in 4.3.10.6.2 through 4.3.10.6.8 are met:

Raised Floor Plenum as listed in the 2005 ROP for the NEC: The space between the top of the finished floor and the underside of a raised floor where used to supply air to the occupied area, or return or exhaust air from or from the occupied area.

The terms air-handling unit room plenum, apparatus casing plenum, ceiling cavity plenum, duct distribution plenum and raised floor plenum as listed in the NFPA 90A standard-2002 are statements and cannot possibly be used as definitions. The submitter of this proposal has stated that the source for these definitions is the NFPA 90A and yet the terms are used and identified differently in the NFPA 90A than in this proposal. There is too much confusion with these terms as how they are identified in the NFPA 90A standard and the proposed 2005 ROP for the NEC. This is a definite correlating problem that exists and will continue to do so until it is fixed.

This comment represents the official position of the International Brotherhood of Electrical Workers Code and Standards Committee.

Panel Meeting Action: Reject

Panel Statement: The revised text accepted by the panel in its action on Comment 16-674 explicitly enumerates the places where entrance cable is prohibited. The text enumerates the prohibited spaces rather than referring a communications installer to the power wiring requirements in Section 300.22. As worded, the original comment would continue to allow unlisted outside plant cable in risers, which is not the panel's intent.

Number Eligible to Vote: 15

Ballot Results: Affirmative: 15

16-724 Log #3157 NEC-P16 **Final Action: Reject**
(820.50 Exception No. 3)

Submitter: Michael I. Callanan, IBEW

Comment on Proposal No: 16-170

Recommendation: This proposal should have been "Accept in Principle" with the following revised text for 820-50:

Exception No. 3: Unlisted outside plant coaxial cables shall be permitted where the length of the cable within the building, measured from its point of entrance, does not exceed 15 m (50 ft) and the cable enters the building from the outside and is terminated in an enclosure.

Substantiation: The submitter has submitted terms that has no positive effect on the National Electrical Code. These terms will add confusion and not clarity to an electrical code section that covers wiring in spaces that provide environmental air. The present language in the 2002 National Electrical Code Section 300.22(B) — Ducts or Plenums for Environmetnal Air and Section 300.22(C) — Other Space Used for Environemntal Air covers in great detail which type of wiring methods should be used and implemented in these spaces. Code-Making Panel 3 which has the responsibility for 322 has not made any changes to this section in the 2005 ROP stage that would allow any changes to be permitted in these spaces (See Proposal 3-94 Panel Statement).

The terms air-handling unit room plenum, apparatus casing plenum, ceiling cavity plenum, duct distribution plenum and raised floor plenum as listed in the NFPA 90A standard-2002 are statements and cannot possibly be used as definitions. The submitter of this proposal has stated that the source for these - definitions is the NFPA 90A and yet the terms are used and identified differently in the NFPA 90A than in this proposal. There is too much confusion with these terms as to how they are identified in the NFPA 90A standard and the proposed 2005 ROP for the NEC. This is a definitie correlating problem that exists and will continue to do so until it is fixed.

Chapter 3 of the NFPA 90A, Standard for the Installation of Air Conditioning and Ventilating Systems, 2002 edition lists and identifies terminology that are officially recognized as Definitions to be used throughout the NFPA 90A

standard. In regards to the following terms: air duct, air-handling unit room plenum, apparatus casing plenum, ceiling cavity plenum, duct distribution plenum, and raised floor plenum; only one of the terms is properly identified and listed as a definition. Under 3.3 General Definitions and more specifically 3.3.5—Air Duct. A conduit or passageway for conveying air to or from heating, cooling, air condtiioning, or ventilating equipment, but not including the plenum, cavity plenum, duct distribution plenum, and raised floor plenum, they are all lsited and identified in Chapter 4 of NFPA 90A standard under the heading of HVAC Systems. These 5 terms are listed and worded differently than those identical terms that are proposed in the 2005 ROP for the NEC. Here is a breakdown of the 5 terms as listed in the 2005 ROP and also NFPA 90A, 2002 standard.

Air — Handling Unit Room Plenum as listed in NFPA 90A standard 2002; 4.3.10.5.1-Individual rooms containing an air-handling unit(s) shall gather return air from various sources and combine the return air within the room for returning to the air-handling unit.

Air — Handling Unit Room Plenum as listed in the 2005 ROP for the NEC: An individual room containing an air-handling unit(s) used to gather return air from various sources and combine the return air within the room for returning to the air-handling unit.

Apparatus Casing Plenum as listed in NFPA 90A standard; 4.3.10.4.1-A fabricated plenum and apparatus casing shall be permitted to be used for supply, return, or exhaust air service.

Apparatus Casing Plenum as listed in the 2005 ROP for the NEC: A fabricated plenum and apparatus casing used for supply, return, or exhaust air service.

Ceiling Cavity Plenum as listed in NFPA 90A standard-2002; 4.3.10.2-The space between the top of the finished ceiling and the underside of the floor of the floor or roof above shall be permitted to be used to supply air to the occupied area, or return or exhaust air from the occupied area, provided that the conditions in 4.3.10.2.1 through 4.3.10.2.8 are met:

Ceiling Cavity Plenum as listed in the 2005 ROP for the NEC: The space between the top of the finished ceiling and the underside of the floor of the floor or roof above where used to supply air to the occupied area, or return or exhaust air from the occupied area.

Duct Distribution Plenum as listed in the NFPA 90A standard-2002; 4.3.10.3-A duct enclosure used for the multiple distribution or gathering of ducts or connectors shall be constructed of materials and methods specified in 4.3.1.

Duct Distribution Plenum as listed in the 2005 ROP for the NEC: A duct enclosure used for the multiple distribution or gathering of ducts or connectors.

Raised Floor Plenum as listed in the NFPA 90A standard-2002; 4.3.10.6.1-The space between the top of the finished floor and the underside of a raised floor shall be permitted to be used to supply air to the occupied area, or return or exhaust air from or return and exhaust air from the occupied area, provided that the conditions in 4.3.10.6.2 through 4.3.10.6.8 are met:

Raised Floor Plenum as listed in the 2005 ROP for the NEC: The space between the top of the finished floor and the underside of a raised floor where used to supply air to the occupied area, or return or exhaust air from or from the occupied area.

The terms air-handling unit room plenum, apparatus casing plenum, ceiling cavity plenum, duct distribution plenum and raised floor plenum as listed in the NFPA 90A standard-2002 are statements and cannot possibly be used as definitions. The submitter of this proposal has stated that the source for these definitions is the NFPA 90A and yet the terms are used and identified differently in the NFPA 90A than in this proposal. There is too much confusion with these terms as how they are identified in the NFPA 90A standard and the proposed 2005 ROP for the NEC. This is a definite correlating problem that exists and will continue to do so until it is fixed.

This comment represents the official position of the International Brotherhood of Electrical Workers Code and Standards Committee.

Panel Meeting Action: Reject

Panel Statement: The revised text accepted by the panel in its action on Comment 16-674 explicitly enumerates the places where entrance cable is prohibited. The text enumerates the prohibited spaces rather than referring a communications installer to the power wiring requirements in Section 300.22. As worded, the original comment would continue to allow unlisted outside plant cable in risers, which is not the panel's intent.

Number Eligible to Vote: 15

Ballot Results: Affirmative: 15

16-725 Log #264 NEC-P16 **Final Action: Accept**
(820.51)

Submitter: Technical Committee on Air Conditioning

Comment on Proposal No: 16-180

Recommendation: Continue to reject this proposal.

Substantiation: The Technical Committee on Air Conditioning agrees with the panel reject statement.

This comment is one in a series of comments including 16-12, 16-40, 16-60, 16-83, 16-115, 16-132, 16-138, 16-156, 16-180, 16-188, 16-195, 16-207, 16-209, 16-211, 16-228, 16-229 and 16-234.

Panel Meeting Action: Accept

Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:

"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."

This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.

Number Eligible to Vote: 15

Ballot Results: Affirmative: 13 Abstain: 2

Comment on Affirmative:

OHDE: See my Affirmative Comment on Comment 16-34.

Explanation of Abstention:

DORNA: See my Explanation of Abstention for Comment 16-34.

KAHN: See my Explanation of Abstention on Comment 16-34.

16-726 Log #292 NEC-P16 **Final Action: Reject**
(820.51)

Submitter: Technical Committee on Air Conditioning

Comment on Proposal No: 16-177

Recommendation: Continue to accept this proposal in principle and change the fine print note per our comment 16-128.

Substantiation: See the comment from the Technical Committee on Air conditioning on proposal 16-37.

Panel Meeting Action: Reject

Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:

"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."

This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.

Number Eligible to Vote: 15

Ballot Results: Affirmative: 13 Abstain: 2

Comment on Affirmative:

OHDE: See my Affirmative Comment on Comment 16-34.

Explanation of Abstention:

DORNA: See my Explanation of Abstention for Comment 16-34.

KAHN: See my Explanation of Abstention on Comment 16-34.

16-727 Log #1475 NEC-P16 **Final Action: Reject**
(820.51)

Submitter: Marcelo M. Hirschler, GBH International / Rep. Fire Retardant Chemicals

Comment on Proposal No: 16-175

Recommendation: Continue accepting this proposal in principle but change the language accepted by CMP 16, both in the text and in the new FPN for section (E). Use the following language for the new sections.

(E) Plenum Coaxial Raceways. Plenum coaxial raceways ~~shall be~~ listed as plenum coaxial raceways shall be permitted for use in ducts, plenums, and other spaces used for environmental air and shall also be listed as having adequate fire-resistant and low smoke-producing characteristics.

~~FPN: For a definition of "adequate fire-resistant and low smoke-producing characteristics" refer to NFPA 90A, Standard for the Installation of Air-Conditioning and Ventilating Systems, which through its listing requirements for optical fiber and communications plenum raceways effectively defines raceways having "adequate fire-resistant characteristics" as raceways having a maximum flame spread distance of 5 ft (1.5 m) or less when tested in accordance with UL 2024, Standard for Safety Optical-Fiber Cable Raceway. Likewise, it effectively defines raceways having "low smoke-producing characteristics" as raceways having a maximum peak optical density of 0.5 or less and an average optical density of 0.15 or less in the same test.~~ One method of defining that a plenum coaxial raceway is a low smoke-producing raceway and a fire-resistant raceway is that the raceway exhibits a maximum peak optical density of 0.5 or less, an average optical density of 0.15 or less, and a maximum flame spread distance of 1.52 m (5 ft) or less when tested in accordance with the plenum test in UL 2024, *Standard for Optical Fiber Cable Raceway*.

(F) Riser Coaxial Raceway. Riser coaxial raceways shall be listed as having adequate fire-resistant characteristics capable of preventing the carrying of fire from floor to floor.

FPN: One method of defining fire-resistant characteristics capable of preventing the carrying of fire from floor to floor is that the raceways pass the requirements of the test for Flame Propagation (riser) in UL 2024, Standard for Optical Fiber Cable Raceway.

(G) General-Purpose Coaxial Raceway. General-purpose coaxial raceways shall be listed as being resistant to the spread of fire.

FPN: One method of defining resistance to the spread of fire is that the raceways pass the requirements of the Vertical-Tray Flame test (General use) in UL 2024, Standard for Optical Fiber Cable raceway.

Substantiation: This comment recommends a rejection of the concept of subdividing plenums and "other spaces used for environmental air". It has already been shown in detail by the fire hazard and fire risk analysis presented together with my original proposals (see for example the section on pages 20802091 of the NEC-ROP of the substantiation for my proposal 3-130) that there is no need to change the requirements, or limit the application, for wiring methods in plenums, because the fire safety record is excellent.

This comment recommends making all Fine Print Notes consistent, among one another and across articles, with Fine Print Notes incorporated everywhere when testing methods exist for listing certain products for an application, by recognizing that listing of plenum raceways is by UL 2024 and it represents listing to both low smoke and low flame spread, and that raceways cannot be listed separately to either property.

This comment also recommends a rejection of the concept of referencing NFPA 90A in the FPN, which would mean that requirements for these raceways could change without the knowledge and assent of NEC CMP members.

It has become clear now that the expertise needed for choosing the type of wiring systems permitted in any space should be the prerogative of the NEC, which (through its various panels and its Technical Correlating Committee) has greater expertise and a broader view than the Technical Committee on Air Conditioning (responsible for NFPA 90A). Therefore, the NEC panels should continue making their own choices regarding wiring methods. The issue of correlation (or even reference) to either NFPA 90A or the categories of plenums used in NFPA 90A should continue to be rejected by CMP 3. As stated by Mr. Harold Ohde in his negative on CMP 16 action on proposal 16-9: "Other codes should not be deciding on the typed of wiring methods to be used in these spaces. The electrical experts are capable of doing this and it is covered quite well in 300.22. The more we let those outside of the NEC make these decisions the more we weaken adoption of the NEC. In addition, we could make the change and there is nothing that requires a jurisdiction to even adopt 90A."

See attached comments from the chairman of the Technical Correlating Committee. (No attachment Received at NFPA.)

Panel Meeting Action: Reject

Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:

"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."

This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.

Number Eligible to Vote: 15

Ballot Results: Affirmative: 13 Abstain: 2

Comment on Affirmative:

OHDE: See my Affirmative Comment on Comment 16-34.

Explanation of Abstention:

DORNA: See my Explanation of Abstention for Comment 16-34.

KAHN: See my Explanation of Abstention on Comment 16-34.

16-728 Log #1766 NEC-P16 **Final Action: Accept**
(820.51)

Note: See the Technical Correlating Committee Note on Comment 16-452.

Submitter: Michael I. Callanan, IBEW

Comment on Proposal No: 16-126

Recommendation: Reject this proposal.

Substantiation: This proposal should be rejected as we agree with the explanation of negative of Mr. Jensen, Mr. Jones, and Mr. Ohde. This comment represents the official position of the International Brotherhood of Electrical Workers Codes and Standards Committee.

Panel Meeting Action: Accept

Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:

"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."

This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.

Number Eligible to Vote: 15

Ballot Results: Affirmative: 13 Abstain: 2

Comment on Affirmative:

OHDE: See my Affirmative Comment on Comment 16-34.

Explanation of Abstention:

DORNA: See my Explanation of Abstention for Comment 16-34.

KAHN: See my Explanation of Abstention on Comment 16-34.

16-729 Log #1774 NEC-P16 **Final Action: Accept**
(820.51)

Submitter: Richard P. Owen, City of St. Paul, Minnesota

Comment on Proposal No: 16-180

Recommendation: Continue to reject.

Substantiation: The Panel 3/Panel 16 Task Group, appointed by the NEC TCC, developed this comment.

The task group agrees with Panel 16's action and statement.

By accepting the majority of the suggested changes in a submitted comment for Proposal 3-94, "Other Spaces for Environmental Air" has been further subdivided into two separate spaces, ceiling cavity and raised floor plenums but the Panel still has maintained the electrical industry terminology associated with these spaces. Providing this further subdivision will enhance the usability of the NEC by making it easier to determine what other spaces are being referenced in this section. It will also improve correlation between the NEC and NFPA 90A.

The following members of Panels 3 and 16 participated in this Task Group assignment: From Panel 3, Mr. Sanford E. Egesdal representing the Automatic Fire Alarm Association, Inc., Mr. Ronald E. Maassen representing the National Electrical Contractors Association, and Mr. Mark C. Ode representing Underwriters Laboratories Inc. From Panel 16, Mr. Robert W. Jensen representing the Building Industry Consulting Services International, Mr. Harold C. Ohde representing the International Brotherhood of Electrical Workers, and Mr. Joseph W. Rao representing the Independent Electrical Contractors, Inc. Mr. Richard P. Owen, the Chairman of CMP 3, representing the International Association of Electrical Inspectors, was the chairman of the Task Group.

Panel Meeting Action: Accept

Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:

"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."

This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.

Number Eligible to Vote: 15

Ballot Results: Affirmative: 13 Abstain: 2

Comment on Affirmative:

OHDE: See my Affirmative Comment on Comment 16-34.

Explanation of Abstention:

DORNA: See my Explanation of Abstention for Comment 16-34.

KAHN: See my Explanation of Abstention on Comment 16-34.

16-730 Log #2251 NEC-P16 **Final Action: Accept**
(820.51)

Note: See the Technical Correlating Committee Note on Comment 16-452.

Submitter: T. David Mills, Bechtel Savannah River, Inc.

Comment on Proposal No: 16-126

Recommendation: Reject proposal in its entirety.

Substantiation:NFPA 90A - 2002 only places a restriction for cables and for testing per NFPA 262 for ceiling cavity plenums (4.3.10.2.6.1) and raised floor plenums (4.3.10.6.5.1). It does not state that these are the only places that this plenum rated cable can be used.

The other sections of NFPA 90A related to all other air spaces including "air

ducts" are silent with respect to cable requirements. This indicates plenum rated cables can be placed anywhere in the air conditioning air handling system without any new "Duct" designator. There are not any other requirements in NFPA 90A to indicate anywhere that a "does not correlate" situation exists between NFPA 70 and NFPA 90A.There is no need for any additional environmental air space identifiers or cable type designators.

Panel Meeting Action: Accept

Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:

"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."

This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.

Number Eligible to Vote: 15

Ballot Results: Affirmative: 13 Abstain: 2

Comment on Affirmative:

OHDE: See my Affirmative Comment on Comment 16-34.

Explanation of Abstention:

DORNA: See my Explanation of Abstention for Comment 16-34.

KAHN: See my Explanation of Abstention on Comment 16-34.

16-731 Log #2269 NEC-P16 **Final Action: Accept**
(820.51)

Note: See the Technical Correlating Committee Note on Comment 16-452.

Submitter: Frank Bisbee, Communication Planning Corporation

Comment on Proposal No: 16-126

Recommendation: Reject this proposal.

Substantiation: In recognizing the use of "duct cable" or "limited combustible cable," the proposal fails to consider toxicity of the newly specified product and the relative incapacitation factor presented by the chemical constituents of the polymer in new cable design. A recent study by the NFPA Fire Protection Research Foundation has advanced an international effort to make certain that people can escape a burning building before being incapacitated (overcome by smoke or gases generated by thermal decomposition). The work is part of a revolution in fire safety in which codes and standards are beginning to address how much smoke, or gases generated by thermal decomposition, will incapacitate people, rather than how much will kill them.

The jacketing and insulating materials used in duct cable and limited combustible cable are subject to heat decomposition and the emission of sub-lethal toxic fumes. Some of these fumes can incapacitate (blinding and choking) the building occupants. The requirements for using "duct cable" have failed to recognize toxicity or emissions that are essentially colorless (i.e. hydrogen fluoride, which converts to hydrofluoric acid upon contact with any moisture, and other toxic gases may be generated).

In 2002, the ISO (International Organization for Standardization), a network of the industrial-standards institutes of 147 countries, put forth a new standard calling for attention to the "sub-lethal" effects of smoke - when the heat, the thickness of smoke, and the toxic gases in smoke will block vision, make a person choke or tear up, or render a person unconscious. Because of this new ISO standard, these effects of smoke are supposed to be taken into account when regulating the size and placement of exits and the types of materials allowed in buildings. But to meet the standard, one needs to know more about the smoke produced by burning various materials. Working with the National Institute of Standards and Technology, the FPRF is laying the scientific groundwork needed to put the new standard into practice. The foundation recently completed the project's second phase of its International study of the Sub-lethal Effects of Fire Smoke on Survivability and Health. In the most recent phase of the study, the foundation's researchers performed three tests: They burned a sofa made of upholstered cushions on a steel frame, some particle board bookcases, and some household cable. In each case, the materials were burned in a room with a long adjacent corridor. The researchers measured the toxic gases emitted by each item, and how quickly the gases filled the room and moved down the corridor. They determined when and where in the room and in the hallway people would have to stop because of the smoke or the heat. Fire-test laboratories and manufacturers are expected to use this data to develop smaller-scale tests that can be done in a laboratory, so they won't need to set a room on fire every time they test a product. FPRF is uniquely equipped to conduct such studies, and NFPA officials expect more lives to be saved because of the new fire-safety standards that will emerge from this work.

By allowing and specifying the use of "duct cable," this proposal supports the use of materials counter to the findings already available in the public domain regarding sub-lethal toxicity of hydrogen fluoride and through the NFPA Fire Protection Research Foundation regarding incapacitation factors. Polymers used in duct cable and other limited combustible cable materials far exceed the incapacitation factor of other materials used in various cable construction both in generation of sub-lethal constituents and in hypertoxicity.

Panel Meeting Action: Accept

Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:

"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."

This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.

Number Eligible to Vote: 15

Ballot Results: Affirmative: 13 Abstain: 2

Comment on Affirmative:

OHDE: See my Affirmative Comment on Comment 16-34.

Explanation of Abstention:

DORNA: See my Explanation of Abstention for Comment 16-34.

KAHN: See my Explanation of Abstention on Comment 16-34.

16-732 Log #2762 NEC-P16 **Final Action: Reject**
(820.51)

Submitter: Richard Fransen, Daikin America, Inc. / Rep. Cable Fire Research Association

Comment on Proposal No: 16-177

Recommendation: Continue to accept this proposal in principle.

Substantiation: CFRA agrees with the panel action.

Panel Meeting Action: Reject

Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:

"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."

This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.

Number Eligible to Vote: 15

Ballot Results: Affirmative: 13 Abstain: 2

Comment on Affirmative:

OHDE: See my Affirmative Comment on Comment 16-34.

Explanation of Abstention:

DORNA: See my Explanation of Abstention for Comment 16-34.

KAHN: See my Explanation of Abstention on Comment 16-34.

16-733 Log #2765 NEC-P16 **Final Action: Accept**
(820.51)

Submitter: Richard Fransen, Daikin America, Inc. / Rep. Cable Fire Research Association

Comment on Proposal No: 16-180

Recommendation: Continue to reject this proposal.

Substantiation: CFRA agrees with the panel action.

Panel Meeting Action: Accept

Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:

"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."

This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.

Number Eligible to Vote: 15

Ballot Results: Affirmative: 13 Abstain: 2

Comment on Affirmative:

OHDE: See my Affirmative Comment on Comment 16-34.

Explanation of Abstention:
DORNA: See my Explanation of Abstention for Comment 16-34.
KAHN: See my Explanation of Abstention on Comment 16-34.

16-734 Log #3165 NEC-P16 **Final Action: Accept**
(820.51)

Submitter: Michael I. Callanan, IBEW
Comment on Proposal No: 16-180
Recommendation: Continue to reject.
Substantiation: I agree with the panel action to reject proposal 16-180. No technical substantiation has been provided that a change to the 2002 NEC language is needed or required. This comment represents the official position of the International Brotherhood of Electrical Workers Code and Standards Committee.
Panel Meeting Action: Accept
Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:
"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."
This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.
Number Eligible to Vote: 15
Ballot Results: Affirmative: 13 Abstain: 2
Comment on Affirmative:
OHDE: See my Affirmative Comment on Comment 16-34.
Explanation of Abstention:
DORNA: See my Explanation of Abstention for Comment 16-34.
KAHN: See my Explanation of Abstention on Comment 16-34.

16-735 Log #3717 NEC-P16 **Final Action: Accept**
(820.51)

Submitter: Marcelo M. Hirschler, GBH International / Rep. Fire Retardant Chemicals Association
Comment on Proposal No: 16-180
Recommendation: Continue rejecting this proposal and make no changes in the terminology of plenum spaces or of "other spaces used for environmental air".
Substantiation: The terminology in NEC 2002 is correct and needs no change. See also the substantiation for my comments on proposal 16-59.
Panel Meeting Action: Accept
Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:
"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."
This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.
Number Eligible to Vote: 15
Ballot Results: Affirmative: 13 Abstain: 2
Comment on Affirmative:
OHDE: See my Affirmative Comment on Comment 16-34.
Explanation of Abstention:
DORNA: See my Explanation of Abstention for Comment 16-34.
KAHN: See my Explanation of Abstention on Comment 16-34.

16-736 Log #3743 NEC-P16 **Final Action: Accept**
(820.51)

Note: See the Technical Correlating Committee Note on Comment 16-452.
Submitter: Marcelo M. Hirschler, GBH International / Rep. Fire Retardant Chemicals Association
Comment on Proposal No: 16-126
Recommendation: Reject this proposal - Also reject the references to NFPA 90A in fine print notes and the creation of the new category of air duct cables and the subdivision of plenums. Revise the FPN to 820.51 as follows, and make no other changes.
~~FPN: One method of defining low smoke producing cables is by establishing an acceptable value of the smoke produced when tested in accordance with NFPA 262-1999, Standard Method of Test for Flame Travel and Smoke of Wires and Cables for Use in Air Handling Spaces, to a maximum peak optical density of 0.5 and a maximum average optical density of 0.15. Similarly, one method of defining fire resistant cables is by defining maximum allowable flame travel distance of 1.52 m (5 ft) when tested in accordance with the same test.~~
FPN: One method of defining a cable that is low smoke producing cable and fire-resistant cable is that the cable exhibits a maximum peak optical density of 0.5 or less, an average optical density of 0.15 or less, and a maximum flame spread distance of 1.52 m (5 ft) or less when tested in accordance with NFPA 262, Standard Method of Test for Flame Travel and Smoke of Wires and Cables for Use in Air Handling Spaces.
Substantiation: There is no need for a new category of CATVD cables. There is also no justification for limiting the use of traditional plenum cables. It has become clear now that the expertise needed for choosing the type of wiring systems permitted in any space should be the prerogative of the NEC, which (through its various panels and its Technical Correlating Committee) has greater expertise and a broader view than the Technical Committee on Air Conditioning (responsible for NFPA 90A). Therefore, the NEC panels should continue making their own choices regarding wiring methods. The issue of correlation (or even reference) to either NFPA 90A or the categories of plenums used in NFPA 90A should be rejected by CMP 16.
Furthermore, the reference to NFPA 90A is not appropriate in the Fine Print Note, since NFPA 90A is not a suitable standard for testing or listing wiring methods. The logical way to have a fine print note is to reference the standard used for testing the fire safety of the materials, which in this case is a combination of NFPA 255 and NFPA 259, or the UL Subject 2424 that contains all the listing requirements.
See further information in the comment I made to recommend rejection of proposal 16-177.
Panel Meeting Action: Accept
Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:
"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."
This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.
Number Eligible to Vote: 15
Ballot Results: Affirmative: 13 Abstain: 2
Comment on Affirmative:
OHDE: See my Affirmative Comment on Comment 16-34.
Explanation of Abstention:
DORNA: See my Explanation of Abstention for Comment 16-34.
KAHN: See my Explanation of Abstention on Comment 16-34.

16-737 Log #2148 NEC-P16 **Final Action: Accept**
(820.51, 800-53 and 820-50)

Note: See the Technical Correlating Committee Note on Comment 16-452.
Submitter: Robert W. Jensen, dbi-Telecommunications
Comment on Proposal No: 16-177
Recommendation: Revise text to read as follows:
Delete listing requirements for "duct cable." Modify to read "Cables shall not be directly placed in air ducts."
Substantiation: All materials that are capable of combustion are a fuel source during a fire event. The proposed air-duct cable is capable of combustion and would, during a fire event, be a fuel source inside the ducts that supply conditioned air to the conditioned spaces.
Heating, ventilating and air conditioning systems are commonly designed with ducts that supply conditioned air to the conditioned spaces (as described in 300.22 Wiring in Ducts, Plenums, and Other Air-Handling Spaces (B) Ducts or Plenums Used for Environmental Air), and use the space above the suspended ceiling to transport return air from the conditioned spaces to the conditioning equipment (as described in 300.22 Wiring in Ducts, Plenums, and Other Air-Handling Spaces (C) Other Space Used for Environmental Air). This would be the case during normal operation. But during a fire event, when smoke is detected by a smoke detector in the space above the suspended ceiling, the fire/smoke damper closes and the smoke and toxic gases are diverted out of the building. When the source of the fire is inside the air supply duct, either the

cable or the equipment that it is connecting to, the positive pressure created by the fan would then force the smoke and toxic gases into the conditioned space. This would continue until such time that sufficient smoke would enter the space above the suspended ceiling and be detected by a smoke detector. While one could argue that smoke detectors could also be placed in air supply ducts, the velocity of the air in supply ducts would make smoke detection problematic and there are no smoke detectors currently available listed for the purpose of installation within air supply ducts.

Building codes specify where fire dampers are required. Fire dampers are installed to prevent transmission of flame where air supply ducts penetrate fire barriers. Running loose cables within an air supply duct would block the dampers from closing allowing the flame to breach the fire barrier. Such an installation would NEVER pass during a building inspection. If cables MUST be placed inside an air supply duct, then the cable MUST be placed in an electrical metallic tubing, flexible metallic tubing, intermediate metal conduit, or rigid metal conduit without an overall nonmetallic covering as prescribed on 300.22 Wiring in Ducts, Plenums, and Other Air-Handiling Spaces (B) Ducts or Plenums Used for Environmental Air. Use of these raceways negates any need for any additional level being added to Table 800.50 Cable Markings, or any other table or section in the code.

NFPA 90A 4.1, General Requirements for Equipment paragraph 4.1.4 specifies, "Electrical wiring and equipment shall be installed in accordance to NFPA 70, National Electrical Code." Seems like the authors of NFPA 90A, the Technical Committee on Air Conditioning already realized that NFPA 70 is sufficient for their needs.

Panel Meeting Action: Accept

Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:

"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."

This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.

Number Eligible to Vote: 15

Ballot Results: Affirmative: 13 Abstain: 2

Comment on Affirmative:

OHDE: See my Affirmative Comment on Comment 16-34.

Explanation of Abstention:

DORNA: See my Explanation of Abstention for Comment 16-34.

KAHN: See my Explanation of Abstention on Comment 16-34.

16-738 Log #3306 NEC-P16 **Final Action: Accept**
(820.51, 800-53 and 820-50)

Note: See the Technical Correlating Committee Note on Comment 16-701.

Submitter: Herbert V. Congdon, III, CC2

Comment on Proposal No: 16-177

Recommendation: Delete listing requirements for "duct cable". Modify to read "Cables shall not be directly placed in air ducts."

Substantiation: • Duct cable is not noncombustible, rather it is a fuel source. Placing this cable directly in the duct is unsafe to the occupants of the building and fire rescue personnel that may be dispatched to the incident. Rather than place this added fuel into a duct, the cable should be placed in noncombustible conduit and routed to the device within the duct.

• Air flow, per code, is difficult to achieve in many buildings. The addition of any cable will deter what can be delivered. There are no proposals that limit the amount of these cables that can occupy an air duct.

• The installation of cable within an air duct, depending upon the velocity of the air, will cause noise in the workplace environment.

• Cables in air ducts are subject to damage by installers that use sheet metal screws when maintaining air ducts. These screws are very sharp and will penetrate the sheath causing an electrical arc and possible fire from dust accumulation in air duct.

• Air ducts will not be able to be cleaned without damaging cables placed within the air duct.

• Air distribution is specified in 4.3 of NFPA 90A and includes 4.3.10 for plenums. These plenums include ceiling cavity plenums (4.3.10.2), duct distribution plenum (4.3.10.3), apparatus casing plenum (4.3.10.4), air handling unit room plenum (4.3.10.5), and raised floor plenum (4.3.10.6). While requirements are specified for cable placed in ceiling cavity plenums and raised floor plenums (noncombustible or limited combustible with smoke requirements per NFPA 262), there are no like requirements for duct distribution plenum, or apparatus casing plenum, or air handling unit room plenum - rather they specify NFPA 255 for testing building materials. As for other areas specified in 4.3, Air Distribution, there are no requirements for cable placement in the air distribution system. Following back to 4.1, General Requirements for Equipment, paragraph 4.1.4 specifies. "electrical wiring and equipment shall be installed in accordance to NFPA 70, National Electrical Code". Seems like NFPA 90A realizes that NFPA 70 is sufficient for their need.

• The NFPA 90A scope is specified for buildings that are 25,000 cubic feet or 3 stories in height. The NEC does not have this restriction. Harmonizing the code to this standard is inappropriate.

Panel Meeting Action: Accept

Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:

"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."

This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.

Number Eligible to Vote: 15

Ballot Results: Affirmative: 13 Abstain: 2

Comment on Affirmative:

OHDE: See my Affirmative Comment on Comment 16-34.

Explanation of Abstention:

DORNA: See my Explanation of Abstention for Comment 16-34.

KAHN: See my Explanation of Abstention on Comment 16-34.

16-739 Log #3340 NEC-P16 **Final Action: Accept**
(820.51, 800.53 and 820.50)

Note: See the Technical Correlating Committee Note on Comment 16-701.

Submitter: Donald Billow, ICC

Comment on Proposal No: 16-177

Recommendation: Delete listing requirements for "duct cable". Modify to read "Cables shall not be directly placed in air ducts."

Substantiation: • Air systems are generally designed with supply ducts that feed the occupied area with returns built into the structure (ceiling space, floor). When a fire is detected, smoke dampers close and divert smoke and toxic gases to the building's exterior. Duct cable is not non-combustible, rather it is a fuel source. There are no provisions for a listed device to detect a toxic burning "duct cable" in the supply duct. Additionally, the toxic smoke would have to emanate from the air outlets within the building causing an unsafe environment until the smoke detector sensor could actuate the smoke dampers into action. Placing this cable directly in the air duct is unsafe to the occupants of the building and fire rescue personnel that may be dispatched tot he incident. Rather than place this added fuel into a duct, the cable should be placed in non-combustible conduit and routed to the device within the duct.

• All buildings that are built having a certain risk factor. Listed plenum cables currently installed within buildings have not been shown to raise the risk factor as there are no incidents sustained in any proposals to warrant a change.

• Air flow, per code, is difficult to achieve in many buildings. The addition of toxic cable will deter what can be delivered. There are no proposals that offer the amount of these toxic cables that can occupy an air duct. Additionally, the installation of cable within an air duct, depending upon the velocity of the air, will cause noise in the environment and unsafe working conditions.

• Cable placed in ducts will cause fire dampers to be restricted from closing. This is not only restricting a fire dampers use, it causes and unsafe environment for occupants in the buildings during a fire emergency.

• Cables in air ducts will be subject to damage by installers that use sheet metal screws when maintaining air ducts. These screws are very sharp and will penetrate the sheath causing an electrical arc and possible fire from dust accumulation in air duct.

• Air ducts will not be able to be cleaned without damaging cables placed within the air duct.

• Air distribution is specified in 4.3 of NFPA 90A and includes 4.3.10 for plenums. These plenums include ceiling cavity plenums (4.3.10.2), duct distribution plenum (4.3.10.3), apparatus casing plenum (4.3.10.4), air handling unit room plenum (4.3.10.5), and raised floor plenum (4.3.10.6). While requirements are specified for cable placed in ceiling cavity plenums and raised floor plenums (non-combustible or limited combustible with smoke requirements per NFPA 262), there are no like requirements for duct distribution plenum, or apparatus casing plenum, or air handling unit room plenum - rather they specify NFPA 255 for testing building materials. As for other areas specified in 4.3, Air Distribution, there are no requirements for cable placement in the air distribution system. Following back to 4.2, General Requirements for Equipment, paragraph 4.1.4 specifies, "electrical wiring and equipment shall be installed in accordance to NFPA 70, National Electrical Code". Seems like NFPA 90A realizes that NFPA 70 is sufficient for their need.

• NFPA 90A scope is specified for buildings that are 25,000 cubic feet or 3

stories in height. The NEC does not have this restriction. Harmonizing the code to this standard is inappropriate.
Panel Meeting Action: Accept
Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:
"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."
This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.
Number Eligible to Vote: 15
Ballot Results: Affirmative: 13 Abstain: 2
Comment on Affirmative:
OHDE: See my Affirmative Comment on Comment 16-34.
Explanation of Abstention:
DORNA: See my Explanation of Abstention for Comment 16-34.
KAHN: See my Explanation of Abstention on Comment 16-34.

16-740 Log #1319 NEC-P16 **Final Action: Accept**
(820.51, 820-53, Figure 820-53, Table 820-53 and Table 820-50)

Note: See the Technical Correlating Committee Note on Comment 16-701.
Submitter: Wayne G. Carson, Carson Assoc. Inc.
Comment on Proposal No: 16-177
Recommendation: Reject proposal.
Substantiation: The explanations of negative votes by Committee members Mr. Jensen, Mr. Jones, and Mr. Odhe are clear and to the point. There is no need for an additional cable category and there is no technical justification for this change.
See also my comment submitted on Proposal 16-37.
Panel Meeting Action: Accept
Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:
"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."
This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.
Number Eligible to Vote: 15
Ballot Results: Affirmative: 13 Abstain: 2
Comment on Affirmative:
OHDE: See my Affirmative Comment on Comment 16-34.
Explanation of Abstention:
DORNA: See my Explanation of Abstention for Comment 16-34.
KAHN: See my Explanation of Abstention on Comment 16-34.

16-741 Log #2248 NEC-P16 **Final Action: Accept**
(820.51, 820-53, Figure 820-53, Table 820-53 and Table 820-50)

Note: See the Technical Correlating Committee Note on Comment 16-701.
Submitter: T. David Mills, Bechtel Savannah River, Inc.
Comment on Proposal No: 16-173
Recommendation: Reject proposal in its entirety.
Substantiation:NFPA 90A - 2002 only places a restriction for cables and for testing per NFPA 262 for ceiling cavity plenums (4.3.10.2.6.1) and raised floor plenums (4.3.10.6.5.1). It does not state that these are the only places that this plenum rated cable can be used.
The other sections of NFPA 90A related to all other air spaces including "air ducts" are silent with respect to cable requirements. This indicates plenum rated cables can be placed anywhere in the air conditioning air handling system without any new "Duct" designator. There are not any other requirements in NFPA 90A to indicate anywhere that a "does not correlate" situation exists between NFPA 70 and NFPA 90A.There is no need for any additional environmental air space identifiers or cable type designators.
Panel Meeting Action: Accept
Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:
"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."
This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.
Number Eligible to Vote: 15
Ballot Results: Affirmative: 13 Abstain: 2
Comment on Affirmative:
OHDE: See my Affirmative Comment on Comment 16-34.
Explanation of Abstention:
DORNA: See my Explanation of Abstention for Comment 16-34.
KAHN: See my Explanation of Abstention on Comment 16-34.

16-742 Log #2250 NEC-P16 **Final Action: Accept**
(820.51, 820-53, Figure 820-53, Table 820-53 and Table 820-50)

Note: See the Technical Correlating Committee Note on Comment 16-701.
Submitter: T. David Mills, Bechtel Savannah River, Inc.
Comment on Proposal No: 16-183
Recommendation: Reject proposal in its entirety.
Substantiation:NFPA 90A - 2002 only places a restriction for cables and for testing per NFPA 262 for ceiling cavity plenums (4.3.10.2.6.1) and raised floor plenums (4.3.10.6.5.1). It does not state that these are the only places that this plenum rated cable can be used.
The other sections of NFPA 90A related to all other air spaces including "air ducts" are silent with respect to cable requirements. This indicates plenum rated cables can be placed anywhere in the air conditioning air handling system without any new "Duct" designator. There are not any other requirements in NFPA 90A to indicate anywhere that a "does not correlate" situation exists between NFPA 70 and NFPA 90A.There is no need for any additional environmental air space identifiers or cable type designators.
Panel Meeting Action: Accept
Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:
"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."
This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.
Number Eligible to Vote: 15
Ballot Results: Affirmative: 13 Abstain: 2
Comment on Affirmative:
OHDE: See my Affirmative Comment on Comment 16-34.
Explanation of Abstention:
DORNA: See my Explanation of Abstention for Comment 16-34.
KAHN: See my Explanation of Abstention on Comment 16-34.

16-743 Log #2254 NEC-P16 **Final Action: Accept**
(820.51, 820-53, Figure 820-53, Table 820-53 and Table 820-50)

Note: See the Technical Correlating Committee Note on Comment 16-701.
Submitter: T. David Mills, Bechtel Savannah River, Inc.
Comment on Proposal No: 16-179
Recommendation: Reject proposal in its entirety.
Substantiation:NFPA 90A - 2002 only places a restriction for cables and for testing per NFPA 262 for ceiling cavity plenums (4.3.10.2.6.1) and raised floor plenums (4.3.10.6.5.1). It does not state that these are the only places that this plenum rated cable can be used.
The other sections of NFPA 90A related to all other air spaces including "air ducts" are silent with respect to cable requirements. This indicates plenum rated cables can be placed anywhere in the air conditioning air handling system without any new "Duct" designator. There are not any other requirements in NFPA 90A to indicate anywhere that a "does not correlate" situation exists between NFPA 70 and NFPA 90A.There is no need for any additional environmental air space identifiers or cable type designators.
Panel Meeting Action: Accept
Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:

"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."

This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.

Number Eligible to Vote: 15
Ballot Results: Affirmative: 13 Abstain: 2
Comment on Affirmative:
OHDE: See my Affirmative Comment on Comment 16-34.
Explanation of Abstention:
DORNA: See my Explanation of Abstention for Comment 16-34.
KAHN: See my Explanation of Abstention on Comment 16-34.

16-744 Log #2255 NEC-P16 **Final Action: Accept**
(820.51, 820-53, Figure 820-53, Table 820-53 and Table 820-50)

Note: See the Technical Correlating Committee Note on Comment 16-701.
Submitter: T. David Mills, Bechtel Savannah River, Inc.
Comment on Proposal No: 16-178
Recommendation: Reject proposal in its entirety.
Substantiation:NFPA 90A - 2002 only places a restriction for cables and for testing per NFPA 262 for ceiling cavity plenums (4.3.10.2.6.1) and raised floor plenums (4.3.10.6.5.1). It does not state that these are the only places that this plenum rated cable can be used.
The other sections of NFPA 90A related to all other air spaces including "air ducts" are silent with respect to cable requirements. This indicates plenum rated cables can be placed anywhere in the air conditioning air handling system without any new "Duct" designator. There are not any other requirements in NFPA 90A to indicate anywhere that a "does not correlate" situation exists between NFPA 70 and NFPA 90A.There is no need for any additional environmental air space identifiers or cable type designators.
Panel Meeting Action: Accept
Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:

"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."

This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.

Number Eligible to Vote: 15
Ballot Results: Affirmative: 13 Abstain: 2
Comment on Affirmative:
OHDE: See my Affirmative Comment on Comment 16-34.
Explanation of Abstention:
DORNA: See my Explanation of Abstention for Comment 16-34.
KAHN: See my Explanation of Abstention on Comment 16-34.

16-745 Log #2256 NEC-P16 **Final Action: Accept**
(820.51, 820-53, Figure 820-53, Table 820-53 and Table 820-50)

Note: See the Technical Correlating Committee Note on Comment 16-701.
Submitter: T. David Mills, Bechtel Savannah River, Inc.
Comment on Proposal No: 16-184
Recommendation: Reject proposal in its entirety.
Substantiation:NFPA 90A - 2002 only places a restriction for cables and for testing per NFPA 262 for ceiling cavity plenums (4.3.10.2.6.1) and raised floor plenums (4.3.10.6.5.1). It does not state that these are the only places that this plenum rated cable can be used.
The other sections of NFPA 90A related to all other air spaces including "air ducts" are silent with respect to cable requirements. This indicates plenum rated cables can be placed anywhere in the air conditioning air handling system without any new "Duct" designator. There are not any other requirements in NFPA 90A to indicate anywhere that a "does not correlate" situation exists between NFPA 70 and NFPA 90A.There is no need for any additional environmental air space identifiers or cable type designators.
Panel Meeting Action: Accept
Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:

"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."

This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.

Number Eligible to Vote: 15
Ballot Results: Affirmative: 13 Abstain: 2
Comment on Affirmative:
OHDE: See my Affirmative Comment on Comment 16-34.
Explanation of Abstention:
DORNA: See my Explanation of Abstention for Comment 16-34.
KAHN: See my Explanation of Abstention on Comment 16-34.

16-746 Log #2260 NEC-P16 **Final Action: Accept**
(820.51, 820-53, Figure 820-53, Table 820-53 and Table 820-50)

Note: See the Technical Correlating Committee Note on Comment 16-701.
Submitter: T. David Mills, Bechtel Savannah River, Inc.
Comment on Proposal No: 16-181
Recommendation: Reject proposal in its entirety.
Substantiation:NFPA 90A - 2002 only places a restriction for cables and for testing per NFPA 262 for ceiling cavity plenums (4.3.10.2.6.1) and raised floor plenums (4.3.10.6.5.1). It does not state that these are the only places that this plenum rated cable can be used.
The other sections of NFPA 90A related to all other air spaces including "air ducts" are silent with respect to cable requirements. This indicates plenum rated cables can be placed anywhere in the air conditioning air handling system without any new "Duct" designator. There are not any other requirements in NFPA 90A to indicate anywhere that a "does not correlate" situation exists between NFPA 70 and NFPA 90A.There is no need for any additional environmental air space identifiers or cable type designators.
Panel Meeting Action: Accept
Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:

"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."

This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.

Number Eligible to Vote: 15
Ballot Results: Affirmative: 13 Abstain: 2
Comment on Affirmative:
OHDE: See my Affirmative Comment on Comment 16-34.
Explanation of Abstention:
DORNA: See my Explanation of Abstention for Comment 16-34.
KAHN: See my Explanation of Abstention on Comment 16-34.

16-747 Log #2261 NEC-P16 **Final Action: Accept**
(820.51, 820-53, Figure 820-53, Table 820-53 and Table 820-50)

Note: See the Technical Correlating Committee Note on Comment 16-701.
Submitter: T. David Mills, Bechtel Savannah River, Inc.
Comment on Proposal No: 16-177
Recommendation: Reject proposal in its entirety.
Substantiation:NFPA 90A - 2002 only places a restriction for cables and for testing per NFPA 262 for ceiling cavity plenums (4.3.10.2.6.1) and raised floor plenums (4.3.10.6.5.1). It does not state that these are the only places that this plenum rated cable can be used.
The other sections of NFPA 90A related to all other air spaces including "air ducts" are silent with respect to cable requirements. This indicates plenum rated cables can be placed anywhere in the air conditioning air handling system without any new "Duct" designator. There are not any other requirements in NFPA 90A to indicate anywhere that a "does not correlate" situation exists between NFPA 70 and NFPA 90A.There is no need for any additional environmental air space identifiers or cable type designators.
Panel Meeting Action: Accept
Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:

"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision

cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."

This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.

Number Eligible to Vote: 15
Ballot Results: Affirmative: 13 Abstain: 2
Comment on Affirmative:
OHDE: See my Affirmative Comment on Comment 16-34.
Explanation of Abstention:
DORNA: See my Explanation of Abstention for Comment 16-34.
KAHN: See my Explanation of Abstention on Comment 16-34.

16-748 Log #1846 NEC-P16 **Final Action: Reject**
(820.51, 820.53 Figure 820.53 and Table 820.50)

Submitter: Thomas P. Hammerberg, Automatic Fire Alarm Association
Comment on Proposal No: 16-177
Recommendation: Continue to accept in principle as published in the ROP.
Substantiation: The Automatic Fire Alarm Association supports the panel action. The panel action clarifies wiring requirements in air ducts and plenums.
Panel Meeting Action: Reject
Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:

"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."

This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.

Number Eligible to Vote: 15
Ballot Results: Affirmative: 13 Abstain: 2
Comment on Affirmative:
OHDE: See my Affirmative Comment on Comment 16-34.
Explanation of Abstention:
DORNA: See my Explanation of Abstention for Comment 16-34.
KAHN: See my Explanation of Abstention on Comment 16-34.

16-749 Log #1463 NEC-P16 **Final Action: Reject**
(820.51, 820.53, Figure 820.53, Table 820.50)

Submitter: Technical Correlating Committee on Signaling Systems for the Protection of Life and Property
Comment on Proposal No: 16-177
Recommendation: Continue to accept in principle as published in the ROP.
Substantiation: The Signaling Systems for the Protection of Life and Property TCC supports the panel action. The panel action clarifies wiring requirements in air ducts and plenums.
Panel Meeting Action: Reject
Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:

"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."

This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.

Number Eligible to Vote: 15
Ballot Results: Affirmative: 13 Abstain: 2
Comment on Affirmative:
OHDE: See my Affirmative Comment on Comment 16-34.
Explanation of Abstention:
DORNA: See my Explanation of Abstention for Comment 16-34.
KAHN: See my Explanation of Abstention on Comment 16-34.

16-750 Log #3159 NEC-P16 **Final Action: Accept**
(820.51, 820.53, Figure 820.53, Table 820.50 and 820.53)

Note: See the Technical Correlating Committee Note on Comment 16-701.
Submitter: Michael I. Callanan, IBEW
Comment on Proposal No: 16-173
Recommendation: Reject this proposal.
Substantiation: This proposal should be rejected as we agree with the explanation of negative of Mr. Jensen, Mr. Jones and Mr. Ohde. This comment represents the official position of the International Brotherhood of Electrical Workers Codes and Standards Committee.
Panel Meeting Action: Accept
Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:

"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."

This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.

Number Eligible to Vote: 15
Ballot Results: Affirmative: 13 Abstain: 2
Comment on Affirmative:
OHDE: See my Affirmative Comment on Comment 16-34.
Explanation of Abstention:
DORNA: See my Explanation of Abstention for Comment 16-34.
KAHN: See my Explanation of Abstention on Comment 16-34.

16-751 Log #3160 NEC-P16 **Final Action: Accept**
(820.51, 820.53, Figure 820.53, Table 820.50 and Table 820.53)

Submitter: Michael I. Callanan, IBEW
Comment on Proposal No: 16-174
Recommendation: Continue to reject this proposal.
Substantiation: We agree with the panel action to reject proposal 16-174 as no technical substantiation has been submitted. This comment represents the official position of the International Brotherhood of Electrical Workers Codes and Standards Committee.
Panel Meeting Action: Accept
Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:

"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."

This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.

Number Eligible to Vote: 15
Ballot Results: Affirmative: 13 Abstain: 2
Comment on Affirmative:
OHDE: See my Affirmative Comment on Comment 16-34.
Explanation of Abstention:
DORNA: See my Explanation of Abstention for Comment 16-34.
KAHN: See my Explanation of Abstention on Comment 16-34.

16-752 Log #3162 NEC-P16 **Final Action: Accept**
(820.51, 820.53, Figure 820.53, Table 820.50, and Table 820.53)

Note: See the Technical Correlating Committee Note on Comment 16-701.
Submitter: Michael I. Callanan, IBEW
Comment on Proposal No: 16-177
Recommendation: Reject this proposal.
Substantiation: This proposal should be rejected as we agree with the explanation of negative of Mr. Jensen, Mr. Jones and Mr. Ohde. This comment represents the official position of the International Brotherhood of Electrical Workers Codes and Standards Committee.
Panel Meeting Action: Accept
Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:

"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision

cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."

This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.

Number Eligible to Vote: 15
Ballot Results: Affirmative: 13 Abstain: 2
Comment on Affirmative:
OHDE: See my Affirmative Comment on Comment 16-34.
Explanation of Abstention:
DORNA: See my Explanation of Abstention for Comment 16-34.
KAHN: See my Explanation of Abstention on Comment 16-34.

16-753 Log #3163 NEC-P16 **Final Action: Accept**
(820.51, 820.53, Figure 820.53, Table 820.50 and Table 820.53)

Note: See the Technical Correlating Committee Note on Comment 16-701.
Submitter: Michael I. Callanan, IBEW
Comment on Proposal No: 16-178
Recommendation: Reject this proposal.
Substantiation: This proposal should be rejected as we agree with the explanation of negative of Mr. Jensen, Mr. Jones and Mr. Ohde. This comment represents the official position of the International Brotherhood of Electrical Workers Codes and Standards Committee.
Panel Meeting Action: Accept
Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:

"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."

This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.

Number Eligible to Vote: 15
Ballot Results: Affirmative: 13 Abstain: 2
Comment on Affirmative:
OHDE: See my Affirmative Comment on Comment 16-34.
Explanation of Abstention:
DORNA: See my Explanation of Abstention for Comment 16-34.
KAHN: See my Explanation of Abstention on Comment 16-34.

16-754 Log #3164 NEC-P16 **Final Action: Accept**
(820.51, 820.53, Figure 820.53, Table 820.50 and Table 820.53)

Note: See the Technical Correlating Committee Note on Comment 16-701.
Submitter: Michael I. Callanan, IBEW
Comment on Proposal No: 16-179
Recommendation: Reject this proposal.
Substantiation: This proposal should be rejected as we agree with the explanation of negative of Mr. Jensen, Mr. Jones and Mr. Ohde. This comment represents the official position of the International Brotherhood of Electrical Workers Codes and Standards Committee.
Panel Meeting Action: Accept
Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:

"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."

This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.

Number Eligible to Vote: 15
Ballot Results: Affirmative: 13 Abstain: 2
Comment on Affirmative:
OHDE: See my Affirmative Comment on Comment 16-34.
Explanation of Abstention:
DORNA: See my Explanation of Abstention for Comment 16-34.
KAHN: See my Explanation of Abstention on Comment 16-34.

16-755 Log #3166 NEC-P16 **Final Action: Accept**
(820.51, 820.53, Figure 820.53, Table 820.50 and Table 820.53)

Note: See the Technical Correlating Committee Note on Comment 16-701.
Submitter: Michael I. Callanan, IBEW
Comment on Proposal No: 16-181
Recommendation: Reject this proposal.
Substantiation: This proposal should be rejected as we agree with the explanation of negative of Mr. Jensen, Mr. Jones and Mr. Ohde. This comment represents the official position of the International Brotherhood of Electrical Workers Codes and Standards Committee.
Panel Meeting Action: Accept
Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:

"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."

This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.

Number Eligible to Vote: 15
Ballot Results: Affirmative: 13 Abstain: 2
Comment on Affirmative:
OHDE: See my Affirmative Comment on Comment 16-34.
Explanation of Abstention:
DORNA: See my Explanation of Abstention for Comment 16-34.
KAHN: See my Explanation of Abstention on Comment 16-34.

16-756 Log #3169 NEC-P16 **Final Action: Accept**
(820.51, 820.53, Figure 820.53, Table 820.50 and Table 820.53)

Note: See the Technical Correlating Committee Note on Comment 16-701.
Submitter: Michael I. Callanan, IBEW
Comment on Proposal No: 16-184
Recommendation: Reject this proposal.
Substantiation: This proposal should be rejected as we agree with the explanation of negative of Mr. Jensen, Mr. Jones and Mr. Ohde. This comment represents the official position of the International Brotherhood of Electrical Workers Codes and Standards Committee.
Panel Meeting Action: Accept
Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:

"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."

This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.

Number Eligible to Vote: 15
Ballot Results: Affirmative: 13 Abstain: 2
Comment on Affirmative:
OHDE: See my Affirmative Comment on Comment 16-34.
Explanation of Abstention:
DORNA: See my Explanation of Abstention for Comment 16-34.
KAHN: See my Explanation of Abstention on Comment 16-34.

16-757 Log #1837 NEC-P16 **Final Action: Reject**
(820.51, 820.53, Figure 820.53, Table 820.53 and Table 820.50)

Submitter: Thomas P. Hammerberg, Automatic Fire Alarm Association
Comment on Proposal No: 16-183
Recommendation: Continue to accept in principle.
Substantiation: The Automatic Fire Alarm Association supports the panel action, which meets the submitter's intent. The panel action clarifies wiring requirements in air ducts and plenums.
Panel Meeting Action: Reject
Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:

"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project

on the applicable technical subjects pending completion of the NFPA 90A revision cycle."

This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.

Number Eligible to Vote: 15
Ballot Results: Affirmative: 13 Abstain: 2
Comment on Affirmative:
OHDE: See my Affirmative Comment on Comment 16-34.
Explanation of Abstention:
DORNA: See my Explanation of Abstention for Comment 16-34.
KAHN: See my Explanation of Abstention on Comment 16-34.

16-758 Log #2894 NEC-P16 **Final Action: Reject**
(820.51,820.53, Figure 820.53 Tables 820.50 and 820.53)

Submitter: Stanley Kaufman, CableSafe, Inc.
Comment on Proposal No: 16-177
Recommendation: Continue to accept proposal 16-177 in principle with the text as shown below.

820.154 Applications of Listed CATV Cables. CATV cables shall comply with the requirements of 820.154(A) through (D) or where cable substitutions are made as shown in Table 820.154.

(A) Air Ducts and Plenums. Cables installed in air ducts and plenums shall comply with the applicable requirements of (1) or (2) below.

(1) Air Ducts. Cables installed in air ducts shall be Type CATVD and shall be associated with the air duct system. Types CATVD, CATVP, CATVR, CATV and CATVX cables installed in compliance with Section 300.22(B) shall be permitted.

(2) Plenums. Cables installed in plenums shall comply with (a) or (b) below.

(a) Cables installed in plenums, other than ceiling cavity plenums and raised floor plenums, shall be Type CATVD and shall be associated with the plenum system. Where installed in an air-handling unit room plenum, Type CATVD cable shall be mechanically protected to a height of 7 feet above the floor. Types CATVD, CATVP, CATVR, CATV and CATVX cables installed in compliance with Section 300.22(B) shall be permitted.

(b) Cables installed in accessible ceiling cavity plenums and accessible raised floor plenums shall be Type CATVD or Type CATVP. Cables installed in inaccessible ceiling cavity plenums and inaccessible raised floor plenums shall be Type CATVD. Types CATVD, CATVP, CATVR, CATV, and CATVX cables installed in compliance with 300.22(C) shall be permitted. Listed plenum CATV raceways shall be permitted to be installed in ceiling cavity plenums and raised floor plenums. Only Type CATVD or CATVP cable shall be permitted to be installed in these raceways.

FPN: Plenums described in NFPA 90A-2002, Standard *for the Installation of Air-Conditioning and Ventilating Systems,* include air-handling unit room plenums, apparatus casing plenums, duct distribution plenums, ceiling cavity plenums, and raised floor plenums.

(B) Riser. Cables installed in risers shall comply with any of the requirements of 820.154(B)(1) through (B)(3).

(1) **Cables in Vertical Runs**. Cables installed in vertical runs and penetrating more than one floor, or cables installed in vertical runs in a shaft, shall be Type CATVR. Floor penetrations requiring Type CATVR shall contain only cables suitable for air duct, plenum or riser use. Listed riser CATV raceways shall be permitted to be installed in vertical riser runs in a shaft from floor to floor. Only Type CATVD, CATVP, and CATVR cables shall be permitted to be installed in these raceways.

(2) **Metal Raceways or Fireproof Shafts.** Types CATV and CATVX cables shall be permitted to be encased in a metal raceway or located in a fireproof shaft having firestops at each floor.

(3) **One- and Two-Family Dwellings.** Types CATV and CATVX cables shall be permitted in one- and two-family dwellings.

FPN: See 820.3(A) for the firestop requirements for floor penetrations.

(C) Cable Trays. Cables installed in cable trays shall be Types CATVD, CATVP, CATVR, and CATV.

(D) Other Wiring Within Buildings. Cables installed in building locations other than the locations covered in 820.154(A) and (B) shall be in accordance with with any of the requirements in 820.154(D)(1) through (D)(5).

1) **General.** Type CATV shall be permitted. Listed CATV general-purpose raceways shall be permitted. Only Types CATVD, CATVP, CATVR, or CATV cables shall be permitted to be installed in general-purpose communications raceways.

2) **In Raceways.** Type CATVX shall be permitted to be installed in a raceway.

3) **Nonconcealed Spaces**. Type CATVX shall be permitted to be installed in nonconcealed spaces where the exposed length of cable does not exceed 3 m (10 ft).

4) **One- and Two-Family Dwellings**. Type CATVX cables less than 10 mm (0.375 in.) in diameter shall be permitted to be installed in one- and two-family dwellings.

5) **Multifamily Dwellings.** Type CATVX cables less than 10 mm (0.375 in.) in diameter shall be permitted to be installed in multifamily dwellings.

Table 820.61 Cable Substitutions

Cable Type	Permitted Substitutions
CATVD	NONE
CATVP	CATVD, CMD,
CATVR	CATVD, CMD, CATVP, CMP
CATV	CATVD, CMD, CATVP, CMP, CATVR, CMR, CMG
CATVX	CATVD, CMD, CATVP, CMP, CATVR, CMR, CATV, CMG, CM

Note: See Figure 820.61. Cable Substitution hierarchy.

See Figure 820-154 on the following page

820.179 Coaxial Cables. Coaxial cables shall be listed in accordance with 820.179(A) through (D) and marked in accordance with Table 820.179.

(A) Type CATVD. Type CATVD community antenna television air duct cable shall be listed as being suitable for use in ducts, plenums, and other spaces used for environmental air and shall also be listed as having a low potential heat value, low flame spread characteristics, and very low smoke-producing characteristics.

FPN: One method of defining a low potential heat cable is establishing an acceptable value of potential heat when tested in accordance with NFPA 259, *Standard Test Method for Potential Heat of Building Materials*, to a maximum potential heat value not exceeding 8141 kJ/kg (3500 BTU/lb). One method of defining low flame spread cable is establishing an acceptable value of flame spread when tested in accordance with NFPA 255, *Standard Method of Test of Surface Burning Characteristics of Building Materials,* to a maximum flame spread index of 25. Similarly, one method of defining very low smoke-producing cable is establishing an acceptable value when tested in accordance with NFPA 255, *Standard Method of Test of Surface Burning Characteristics of Building Materials,* to maximum smoke developed index of 50. These test methods and resultant values correlate with the requirements of NFPA 90A-2002, *Standard for the Installation of Air-Conditioning and Ventilating System* for materials installed in ducts and plenums.

(B) Type CATVP. Type CATVP community antenna television plenum cable shall be listed as being suitable for use in ceiling cavity and raised floor plenums and shall also be listed as having adequate fire-resistant and low smoke-producing characteristics.

FPN: For a definition of "adequate fire-resistant and low smoke-producing characteristics" refer to NFPA 90A, *Standard for the Installation of Air-Conditioning and Ventilating Systems,* which through its listing requirements for plenum cables, effectively defines cables having "adequate fire-resistant characteristics" as cables having a maximum flame spread distance of 5 ft (1.5 m) or less when tested in accordance with NFPA 262 *Standard Method of Test for Flame Travel and Smoke of Wires and Cables for Use in Air-Handling Spaces*. Likewise, it effectively defines cables having "low smoke-producing characteristics" as cables having a maximum peak optical density of 0.5 or less and an average optical density of 0.15 or less in the NFPA 262 test.

(C) Type CATVR. Type CATVR community antenna television riser cable shall be listed as being suitable for use in a vertical run in a shaft or from floor to floor and shall also be listed as having fire-resistant characteristics capable of preventing the carrying of fire from floor to floor.

FPN: One method of defining fire-resistant characteristics capable of preventing the carrying of fire from floor to floor is that the cables pass the requirements of ANSI/UL 1666-1997, Standard Test for Flame Propagation Height of Electrical and Optical-Fiber Cable Installed Vertically in Shafts.

(D) Type CATV. Type CATV community antenna television cable shall be listed as being suitable for general-purpose CATV use, with the exception of risers and plenums, and shall also be listed as being resistant to the spread of fire.

FPN: One method of defining resistant to the spread of fire is that the cables do not spread fire to the top of the tray in the vertical-tray flame test in ANSI/UL 1581-1991, Reference Standard for Electrical Wires, Cables and Flexible Cords.

Another method of defining resistant to the spread of fire is for the damage (char length) not to exceed 1.5 m (4 ft 11 in.) when performing the vertical flame test for cables in cable trays, as described in CSA C22.2 No. 0.3-M-1985, Test Methods for Electrical Wires and Cables.

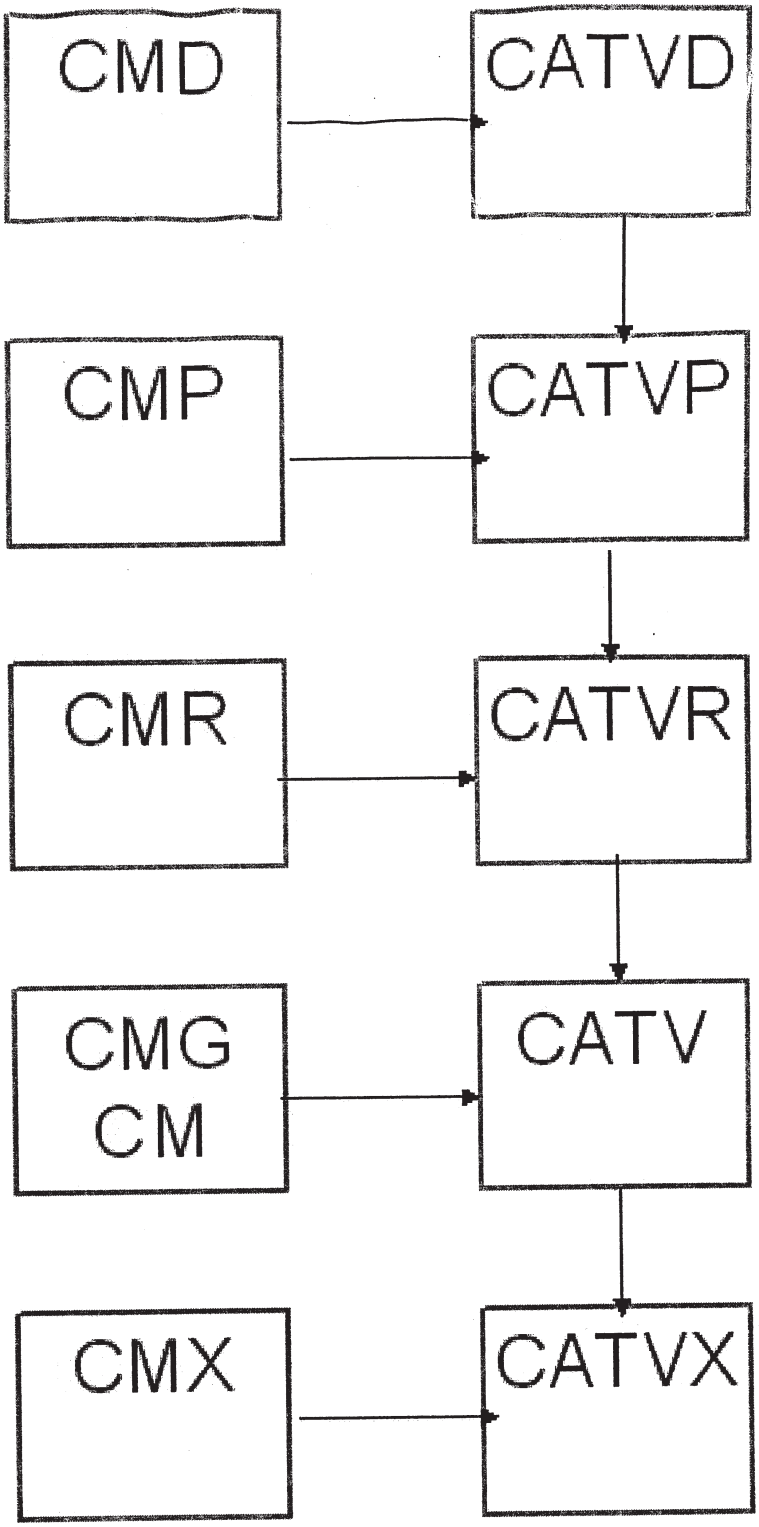
(E) Type CATVX. Type CATVX limited-use community antenna television cable shall be listed as being suitable for use in dwellings and for use in raceway and shall also be listed as being resistant to flame spread.

FPN: One method of determining that cable is resistant to flame spread is by testing the cable to the VW-1 (vertical-wire) flame test in ANSI/UL 1581-1991, Reference Standard for Electrical Wires, Cables and Flexible Cords.

Table 800.82, Cable markings

Cable Marking	Type
CATVD	CATV air duct cable
CATVP	CATV plenum cable
CATVR	CATV riser cable
CATV	CATV general-purpose cable
CATVX	CATV limited-use cable

FPN: Cable types are listed in descending order of fire resistance rating.



Type CATV—Community antenna television cables
Type CM—Communications cables

A → B Coaxial cable A shall be permitted to be used in place of coaxial cable B.

Figure 820.154 Cable Substitution Hierarchy

Substantiation: The suggested text contains the following changes from the text accepted by panel sixteen's action on proposal 16-177:

1) The sections have been renumbered to use the numbering scheme proposed by the renumbering task group that was established in response to the TCC directive on proposals 3-126 and 3-223.

2) "G" cables have been restored because TCC action on proposal 16-28 required G cables to remain in the code. "G" cables were in the original proposal.

3) The installation requirements for risers were revised to permit air duct cable in a riser.

4) The fine print note for listing plenum cables was revised to use the text suggested by the Technical Committee on Air Conditioning in their comment on proposal 16-128.

5) The listing requirement for general-purpose cables was revised to add "air ducts" to the list of spaces these cables are not listed for.

6) Applications of CATV raceways were included since proposal 16-175 and 16-194 were accepted.

Panel Meeting Action: Reject

Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:

"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."

This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.

Number Eligible to Vote: 15

Ballot Results: Affirmative: 13 Abstain: 2

Comment on Affirmative:

OHDE: See my Affirmative Comment on Comment 16-34.

Explanation of Abstention:

DORNA: See my Explanation of Abstention for Comment 16-34.

KAHN: See my Explanation of Abstention on Comment 16-34.

16-759 Log #3167 NEC-P16 **Final Action: Accept**

(820.51, 820.53, Table 820.50 and Table 820.53)

Note: See the Technical Correlating Committee Note on Comment 16-701.

Submitter: Michael I. Callanan, IBEW

Comment on Proposal No: 16-182

Recommendation: Reject this proposal.

Substantiation: This proposal should be rejected as we agree with the explanation of negative of Mr. Jensen, Mr. Jones and Mr. Ohde. This comment represents the official position of the International Brotherhood of Electrical Workers Codes and Standards Committee.

Panel Meeting Action: Accept

Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:

"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."

This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.

Number Eligible to Vote: 15

Ballot Results: Affirmative: 13 Abstain: 2

Comment on Affirmative:

OHDE: See my Affirmative Comment on Comment 16-34.

Explanation of Abstention:

DORNA: See my Explanation of Abstention for Comment 16-34.

KAHN: See my Explanation of Abstention on Comment 16-34.

16-760 Log #3168 NEC-P16 **Final Action: Accept**

(820.51, 820.53, Table 820.50, Figure 820.53 Table 820.50 and Table 820.53)

Note: See the Technical Correlating Committee Note on Comment 16-701.

Submitter: Michael I. Callanan, IBEW

Comment on Proposal No: 16-183

Recommendation: Reject this proposal.

Substantiation: This proposal should be rejected as we agree with the explanation of negative of Mr. Jensen, Mr. Jones and Mr. Ohde. This comment represents the official position of the International Brotherhood of Electrical Workers Codes and Standards Committee.

Panel Meeting Action: Accept

Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:

"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."

This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.

Number Eligible to Vote: 15

Ballot Results: Affirmative: 13 Abstain: 2

Comment on Affirmative:

OHDE: See my Affirmative Comment on Comment 16-34.

Explanation of Abstention:

DORNA: See my Explanation of Abstention for Comment 16-34.

KAHN: See my Explanation of Abstention on Comment 16-34.

16-761 Log #3161 NEC-P16 **Final Action: Accept**

(820.51, 820.53, Table 820.50, Figure and Table 820.53)

Note: See the Technical Correlating Committee Note on Comment 16-701.

Submitter: Michael I. Callanan, IBEW

Comment on Proposal No: 16-176

Recommendation: Reject this proposal.

Substantiation: This proposal should be rejected as we agree with the explanation of negative of Mr. Jensen, Mr. Jones and Mr. Ohde. This comment represents the official position of the International Brotherhood of Electrical Workers Codes and Standards Committee.

Panel Meeting Action: Accept

Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:

"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."

This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.

Number Eligible to Vote: 15

Ballot Results: Affirmative: 13 Abstain: 2

Comment on Affirmative:

OHDE: See my Affirmative Comment on Comment 16-34.

Explanation of Abstention:

DORNA: See my Explanation of Abstention for Comment 16-34.

KAHN: See my Explanation of Abstention on Comment 16-34.

16-762 Log #2240 NEC-P16 **Final Action: Accept**

(820.51, Table 820-50, 820-53(A) and Table 820-53)

Submitter: T. David Mills, Bechtel Savannah River, Inc.

Comment on Proposal No: 16-174

Recommendation: Reject proposal in its entirety.

Substantiation:NFPA 90A - 2002 only places a restriction for cables and for testing per NFPA 262 for ceiling cavity plenums (4.3.10.2.6.1) and raised floor plenums (4.3.10.6.5.1). It does not state that these are the only places that this plenum rated cable can be used.

The other sections of NFPA 90A related to all other air spaces including "air ducts" are silent with respect to cable requirements. This indicates plenum rated cables can be placed anywhere in the air conditioning air handling system without any new "Duct" designator. There are not any other requirements in NFPA 90A to indicate anywhere that a "does not correlate" situation exists between NFPA 70 and NFPA 90A.There is no need for any additional environmental air space identifiers or cable type designators.

Panel Meeting Action: Accept

Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:

"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision

cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."

This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.

Number Eligible to Vote: 15
Ballot Results: Affirmative: 13 Abstain: 2
Comment on Affirmative:
OHDE: See my Affirmative Comment on Comment 16-34.
Explanation of Abstention:
DORNA: See my Explanation of Abstention for Comment 16-34.
KAHN: See my Explanation of Abstention on Comment 16-34.

16-763 Log #1693 NEC-P16 **Final Action: Reject**
(820.51, Table 820-50, 820-53 and Table 820-53)

Submitter: Richard P. Owen, City of St. Paul, Minnesota
Comment on Proposal No: 16-172
Recommendation: Continue to Accept this Proposal in Principle.
Substantiation: The Panel 3/Panel 16 Task Group, appointed by the NEC TCC, developed this comment.

The task group agrees with Panel 16's action and statement.

The NEC TCC Task Group on Correlation Issues Between Panels 3 and 16 met three times via teleconference calls. The assignment by the TCC Chairman was to attempt to develop a resolution and accompanying comments for the different actions taken on proposals dealing with similar issues by CMP 3 and CMP 16 for their respective Articles in Chapters 7 and 8 of the NEC.

The Task Group studied the issues and determined that there were five major differences in the actions on proposals concerning Articles 725, 760, 770, 800, 820, and 830. The voting on these issues was not unanimous but did pass as at least a simple majority of the Task Group.

One of the major differences involved installing air duct cables in a fabricated air duct without enclosing the cable in a metal raceway.

The Task Group members who attended the teleconference call voted to accept text that permits "air duct cable" to be installed in fabricated ducts without enclosing in an additional metal raceway or metal cable. The text to be accepted by Panel 3 is recommended to be similar to that found in Proposals 3-194 for Article 725 and 3-288 for Article 760. The "air duct cable" will replace the plenum cable that was previously acceptable in fabricated duct without enclosing in a metal raceway or metal cable assembly.

The following members of Panels 3 and 16 participated in this Task Group assignment: From Panel 3, Mr. Sanford E. Egesdal representing the Automatic Fire Alarm Association, Inc., Mr. Ronald E. Maassen representing the National Electrical Contractors Association, and Mr. Mark C. Ode representing Underwriters Laboratories Inc. From Panel 16, Mr. Robert W. Jensen representing the Building Industry Consulting Services International, Mr. Harold C. Ohde representing the International Brotherhood of Electrical Workers, and Mr. Joseph W. Rao representing the Independent Electrical Contractors, Inc. Mr. Richard P. Owen, the Chairman of CMP 3, representing the International Association of Electrical Inspectors, was the chairman of the Task Group.

Panel Meeting Action: Reject
Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:

"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."

This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.

Number Eligible to Vote: 15
Ballot Results: Affirmative: 13 Abstain: 2
Comment on Affirmative:
OHDE: See my Affirmative Comment on Comment 16-34.
Explanation of Abstention:
DORNA: See my Explanation of Abstention for Comment 16-34.
KAHN: See my Explanation of Abstention on Comment 16-34.

16-764 Log #1696 NEC-P16 **Final Action: Reject**
(820.51, Table 820-50, 820-53 and Table 820-53)

Submitter: Richard P. Owen, City of St. Paul, Minnesota
Comment on Proposal No: 16-176
Recommendation: Continue to Accept in Principle.
Substantiation: The Panel 3/Panel 16 Task Group, appointed by the NEC TCC, developed this comment.

The task group agrees with Panel 16's action and statement.

The NEC TCC Task Group on Correlation Issues Between Panels 3 and 16 met three times via teleconference calls. The assignment by the TCC Chairman was to attempt to develop a resolution and accompanying comments for the different actions taken on proposals dealing with similar issues by CMP 3 and CMP 16 for their respective Articles in Chapters 7 and 8 of the NEC.

The Task Group studied the issues and determined that there were five major differences in the actions on proposals concerning Articles 725, 760, 770, 800, 820, and 830. The voting on these issues was not unanimous but did pass as at least a simple majority of the Task Group.

One of the major differences involved installing air duct cables in a fabricated air duct without enclosing the cable in a metal raceway.

The Task Group members who attended the teleconference call voted to accept text that permits "air duct cable" to be installed in fabricated ducts without enclosing in an additional metal raceway or metal cable. The text to be accepted by Panel 3 is recommended to be similar to that found in Proposals 3-194 for Article 725 and 3-288 for Article 760. The "air duct cable" will replace the plenum cable that was previously acceptable in fabricated duct without enclosing in a metal raceway or metal cable assembly.

The following members of Panels 3 and 16 participated in this Task Group assignment: From Panel 3, Mr. Sanford E. Egesdal representing the Automatic Fire Alarm Association, Inc., Mr. Ronald E. Maassen representing the National Electrical Contractors Association, and Mr. Mark C. Ode representing Underwriters Laboratories Inc. From Panel 16, Mr. Robert W. Jensen representing the Building Industry Consulting Services International, Mr. Harold C. Ohde representing the International Brotherhood of Electrical Workers, and Mr. Joseph W. Rao representing the Independent Electrical Contractors, Inc. Mr. Richard P. Owen, the Chairman of CMP 3, representing the International Association of Electrical Inspectors, was the chairman of the Task Group.

Panel Meeting Action: Reject
Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:

"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."

This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.

Number Eligible to Vote: 15
Ballot Results: Affirmative: 13 Abstain: 2
Comment on Affirmative:
OHDE: See my Affirmative Comment on Comment 16-34.
Explanation of Abstention:
DORNA: See my Explanation of Abstention for Comment 16-34.
KAHN: See my Explanation of Abstention on Comment 16-34.

16-765 Log #1704 NEC-P16 **Final Action: Reject**
(820.51, Table 820-50, 820-53 and Table 820-53)

Submitter: Richard P. Owen, City of St. Paul, Minnesota
Comment on Proposal No: 16-182
Recommendation: Continue to Accept in Principle.
Substantiation: The Panel 3/Panel 16 Task Group, appointed by the NEC TCC, developed this comment.

The task group agrees with Panel 16's action and statement.

The NEC TCC Task Group on Correlation Issues Between Panels 3 and 16 met three times via teleconference calls. The assignment by the TCC Chairman was to attempt to develop a resolution and accompanying comments for the different actions taken on proposals dealing with similar issues by CMP 3 and CMP 16 for their respective Articles in Chapters 7 and 8 of the NEC.

The Task Group studied the issues and determined that there were five major differences in the actions on proposals concerning Articles 725, 760, 770, 800, 820, and 830. The voting on these issues was not unanimous but did pass as at least a simple majority of the Task Group.

One of the major differences involved installing air duct cables in a fabricated air duct without enclosing the cable in a metal raceway.

The Task Group members who attended the teleconference call voted to accept text that permits "air duct cable" to be installed in fabricated ducts without enclosing in an additional metal raceway or metal cable. The text to be accepted by Panel 3 is recommended to be similar to that found in Proposals 3-194 for Article 725 and 3-288 for Article 760. The "air duct cable" will replace

the plenum cable that was previously acceptable in fabricated duct without enclosing in a metal raceway or metal cable assembly.

The following members of Panels 3 and 16 participated in this Task Group assignment: From Panel 3, Mr. Sanford E. Egesdal representing the Automatic Fire Alarm Association, Inc., Mr. Ronald E. Maassen representing the National Electrical Contractors Association, and Mr. Mark C. Ode representing Underwriters Laboratories Inc. From Panel 16, Mr. Robert W. Jensen representing the Building Industry Consulting Services International, Mr. Harold C. Ohde representing the International Brotherhood of Electrical Workers, and Mr. Joseph W. Rao representing the Independent Electrical Contractors, Inc. Mr. Richard P. Owen, the Chairman of CMP 3, representing the International Association of Electrical Inspectors, was the chairman of the Task Group.

Panel Meeting Action: Reject

Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:

"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."

This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.

Number Eligible to Vote: 15

Ballot Results: Affirmative: 13 Abstain: 2

Comment on Affirmative:

OHDE: See my Affirmative Comment on Comment 16-34.

Explanation of Abstention:

DORNA: See my Explanation of Abstention for Comment 16-34.

KAHN: See my Explanation of Abstention on Comment 16-34.

16-766 Log #2242 NEC-P16 **Final Action: Accept**

(820.51, Table 820-50, 820-53 and Table 820-53)

Note: See the Technical Correlating Committee Note on Comment 16-701.

Submitter: T. David Mills, Bechtel Savannah River, Inc.

Comment on Proposal No: 16-182

Recommendation: Reject proposal in its entirety.

Substantiation:NFPA 90A - 2002 only places a restriction for cables and for testing per NFPA 262 for ceiling cavity plenums (4.3.10.2.6.1) and raised floor plenums (4.3.10.6.5.1). It does not state that these are the only places that this plenum rated cable can be used.

The other sections of NFPA 90A related to all other air spaces including "air ducts" are silent with respect to cable requirements. This indicates plenum rated cables can be placed anywhere in the air conditioning air handling system without any new "Duct" designator. There are not any other requirements in NFPA 90A to indicate anywhere that a "does not correlate" situation exists between NFPA 70 and NFPA 90A.There is no need for any additional environmental air space identifiers or cable type designators.

Panel Meeting Action: Accept

Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:

"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."

This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.

Number Eligible to Vote: 15

Ballot Results: Affirmative: 13 Abstain: 2

Comment on Affirmative:

OHDE: See my Affirmative Comment on Comment 16-34.

Explanation of Abstention:

DORNA: See my Explanation of Abstention for Comment 16-34.

KAHN: See my Explanation of Abstention on Comment 16-34.

16-767 Log #2244 NEC-P16 **Final Action: Accept**

(820.51, Table 820-50, 820-53 and Table 820-53)

Note: See the Technical Correlating Committee Note on Comment 16-701.

Submitter: T. David Mills, Bechtel Savannah River, Inc.

Comment on Proposal No: 16-172

Recommendation: Reject proposal in its entirety.

Substantiation:NFPA 90A - 2002 only places a restriction for cables and for testing per NFPA 262 for ceiling cavity plenums (4.3.10.2.6.1) and raised floor plenums (4.3.10.6.5.1). It does not state that these are the only places that this plenum rated cable can be used.

The other sections of NFPA 90A related to all other air spaces including "air ducts" are silent with respect to cable requirements. This indicates plenum rated cables can be placed anywhere in the air conditioning air handling system without any new "Duct" designator. There are not any other requirements in NFPA 90A to indicate anywhere that a "does not correlate" situation exists between NFPA 70 and NFPA 90A.There is no need for any additional environmental air space identifiers or cable type designators.

Panel Meeting Action: Accept

Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:

"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."

This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.

Number Eligible to Vote: 15

Ballot Results: Affirmative: 13 Abstain: 2

Comment on Affirmative:

OHDE: See my Affirmative Comment on Comment 16-34.

Explanation of Abstention:

DORNA: See my Explanation of Abstention for Comment 16-34.

KAHN: See my Explanation of Abstention on Comment 16-34.

16-768 Log #2246 NEC-P16 **Final Action: Accept**

(820.51, Table 820-50, 820-53 and Table 820-53)

Note: See the Technical Correlating Committee Note on Comment 16-701.

Submitter: T. David Mills, Bechtel Savannah River, Inc.

Comment on Proposal No: 16-176

Recommendation: Reject proposal in its entirety.

Substantiation:NFPA 90A - 2002 only places a restriction for cables and for testing per NFPA 262 for ceiling cavity plenums (4.3.10.2.6.1) and raised floor plenums (4.3.10.6.5.1). It does not state that these are the only places that this plenum rated cable can be used.

The other sections of NFPA 90A related to all other air spaces including "air ducts" are silent with respect to cable requirements. This indicates plenum rated cables can be placed anywhere in the air conditioning air handling system without any new "Duct" designator. There are not any other requirements in NFPA 90A to indicate anywhere that a "does not correlate" situation exists between NFPA 70 and NFPA 90A.There is no need for any additional environmental air space identifiers or cable type designators.

Panel Meeting Action: Accept

Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:

"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."

This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.

Number Eligible to Vote: 15

Ballot Results: Affirmative: 13 Abstain: 2

Comment on Affirmative:

OHDE: See my Affirmative Comment on Comment 16-34.

Explanation of Abstention:

DORNA: See my Explanation of Abstention for Comment 16-34.

KAHN: See my Explanation of Abstention on Comment 16-34.

16-769 Log #2496 NEC-P16 **Final Action: Accept**

(820.51, Table 820-50, 820-53 and Table 820-53)

Note: See the Technical Correlating Committee Note on Comment 16-701.

Submitter: William A. Wolfe, Steel Tube Institute of North America

Comment on Proposal No: 16-172

Recommendation: Reject this proposal.

Substantiation: See our companion proposal on 16-37.

Panel Meeting Action: Accept
Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:

"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."

This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.
Number Eligible to Vote: 15
Ballot Results: Affirmative: 13 Abstain: 2
Comment on Affirmative:
OHDE: See my Affirmative Comment on Comment 16-34.
Explanation of Abstention:
DORNA: See my Explanation of Abstention for Comment 16-34.
KAHN: See my Explanation of Abstention on Comment 16-34.

16-770 Log #2503 NEC-P16 **Final Action: Accept**
(820.51, Table 820-50, 820-53 and Table 820-53)

Note: See the Technical Correlating Committee Note on Comment 16-701.
Submitter: William A. Wolfe, Steel Tube Institute of North America
Comment on Proposal No: 16-176
Recommendation: Reject this proposal.
Substantiation: See our companion proposal on 16-37.
Panel Meeting Action: Accept
Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:

"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."

This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.
Number Eligible to Vote: 15
Ballot Results: Affirmative: 13 Abstain: 2
Comment on Affirmative:
OHDE: See my Affirmative Comment on Comment 16-34.
Explanation of Abstention:
DORNA: See my Explanation of Abstention for Comment 16-34.
KAHN: See my Explanation of Abstention on Comment 16-34.

16-771 Log #2831 NEC-P16 **Final Action: Reject**
(820.51, Table 820-50, 820-53 and Table 820-53)

Submitter: Richard P. Owen, City of St. Paul, Minnesota
Comment on Proposal No: 16-172
Recommendation: Continue to accept this proposal in principle.
Substantiation: The Panel 3/Panel 16 Task Group, appointed by the NEC TCC, developed this comment.

The task group agrees with Panel 16's action and statement.

The NEC TCC Task Group on Correlation Issues Between Panels 3 and 16 met three times via teleconference calls. The assignment by the TCC Chairman was to attempt to develop a resolution and accompanying comments for the different actions taken on proposals dealing with similar issues by CMP 3 and CMP 16 for their respective Articles in Chapters 7 and 8 of the NEC.

The Task Group studied the issues and determined that there were five major differences in the actions on proposals concerning Articles 725, 760, 770, 800, 820, and 830. The voting on these issues was not unanimous but did pass as at least a simple majority of the Task Group.

One of the major differences involved installing air duct cables in a fabricated air duct without enclosing the cable in a metal raceway.

The Task Group members who attended the teleconference call voted to accept text that permits "air duct cable" to be installed in fabricated ducts without enclosing in an additional metal raceway or metal cable. The text to be accepted by Panel 3 is recommended to be similar to that found in Proposals 3-194 for Article 725 and 3-288 for Article 760. The "air duct cable" will replace the plenum cable that was previously acceptable in fabricated duct without enclosing in a metal raceway or metal cable assembly.

The following members of Panels 3 and 16 participated in this Task Group assignment: From Panel 3, Mr. Sanford E. Egesdal representing the Automatic Fire Alarm Association, Inc., Mr. Ronald E. Maassen representing the National Electrical Contractors Association, and Mr. Mark C. Ode representing Underwriters Laboratories Inc. From Panel 16, Mr. Robert W. Jensen representing the Building Industry Consulting Services International, Mr. Harold C. Ohde representing the International Brotherhood of Electrical Workers, and Mr. Joseph W. Rao representing the Independent Electrical Contractors, Inc. Mr. Richard P. Owen, the Chairman of CMP 3, representing the International Association of Electrical Inspectors, was the chairman of the Task Group.
Panel Meeting Action: Reject
Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:

"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."

This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.
Number Eligible to Vote: 15
Ballot Results: Affirmative: 13 Abstain: 2
Comment on Affirmative:
OHDE: See my Affirmative Comment on Comment 16-34.
Explanation of Abstention:
DORNA: See my Explanation of Abstention for Comment 16-34.
KAHN: See my Explanation of Abstention on Comment 16-34.

16-772 Log #2833 NEC-P16 **Final Action: Reject**
(820.51, Table 820-50, 820-53 and Table 820-53)

Submitter: Richard P. Owen, City of St. Paul, Minnesota
Comment on Proposal No: 16-176
Recommendation: Continue to accept in principle.
Substantiation: The Panel 3/Panel 16 Task Group, appointed by the NEC TCC, developed this comment.

The task group agrees with Panel 16's action and statement.

The NEC TCC Task Group on Correlation Issues Between Panels 3 and 16 met three times via teleconference calls. The assignment by the TCC Chairman was to attempt to develop a resolution and accompanying comments for the different actions taken on proposals dealing with similar issues by CMP 3 and CMP 16 for their respective Articles in Chapters 7 and 8 of the NEC.

The Task Group studied the issues and determined that there were five major differences in the actions on proposals concerning Articles 725, 760, 770, 800, 820, and 830. The voting on these issues was not unanimous but did pass as at least a simple majority of the Task Group.

One of the major differences involved installing air duct cables in a fabricated air duct without enclosing the cable in a metal raceway.

The Task Group members who attended the teleconference call voted to accept text that permits "air duct cable" to be installed in fabricated ducts without enclosing in an additional metal raceway or metal cable. The text to be accepted by Panel 3 is recommended to be similar to that found in Proposals 3-194 for Article 725 and 3-288 for Article 760. The "air duct cable" will replace the plenum cable that was previously acceptable in fabricated duct without enclosing in a metal raceway or metal cable assembly.

The following members of Panels 3 and 16 participated in this Task Group assignment: From Panel 3, Mr. Sanford E. Egesdal representing the Automatic Fire Alarm Association, Inc., Mr. Ronald E. Maassen representing the National Electrical Contractors Association, and Mr. Mark C. Ode representing Underwriters Laboratories Inc. From Panel 16, Mr. Robert W. Jensen representing the Building Industry Consulting Services International, Mr. Harold C. Ohde representing the International Brotherhood of Electrical Workers, and Mr. Joseph W. Rao representing the Independent Electrical Contractors, Inc. Mr. Richard P. Owen, the Chairman of CMP 3, representing the International Association of Electrical Inspectors, was the chairman of the Task Group.
Panel Meeting Action: Reject
Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:

"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project

on the applicable technical subjects pending completion of the NFPA 90A revision cycle."

This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.

Number Eligible to Vote: 15
Ballot Results: Affirmative: 13 Abstain: 2
Comment on Affirmative:
OHDE: See my Affirmative Comment on Comment 16-34.
Explanation of Abstention:
DORNA: See my Explanation of Abstention for Comment 16-34.
KAHN: See my Explanation of Abstention on Comment 16-34.

16-773 Log #2844 NEC-P16 **Final Action: Reject**
(820.51, Table 820-50, 820-53 and Table 820-53)

Submitter: Richard P. Owen, City of St. Paul, Minnesota
Comment on Proposal No: 16-182
Recommendation: Continue to accept in principle.
Substantiation: The Panel 3/Panel 16 Task Group, appointed by the NEC TCC, developed this comment.

The task group agrees with Panel 16's action and statement.

The NEC TCC Task Group on Correlation Issues Between Panels 3 and 16 met three times via teleconference calls. The assignment by the TCC Chairman was to attempt to develop a resolution and accompanying comments for the different actions taken on proposals dealing with similar issues by CMP 3 and CMP 16 for their respective Articles in Chapters 7 and 8 of the NEC.

The Task Group studied the issues and determined that there were five major differences in the actions on proposals concerning Articles 725, 760, 770, 800, 820, and 830. The voting on these issues was not unanimous but did pass as at least a simple majority of the Task Group.

One of the major differences involved installing air duct cables in a fabricated air duct without enclosing the cable in a metal raceway.

The Task Group members who attended the teleconference call voted to accept text that permits "air duct cable" to be installed in fabricated ducts without enclosing in an additional metal raceway or metal cable. The text to be accepted by Panel 3 is recommended to be similar to that found in Proposals 3-194 for Article 725 and 3-288 for Article 760. The "air duct cable" will replace the plenum cable that was previously acceptable in fabricated duct without enclosing in a metal raceway or metal cable assembly.

The following members of Panels 3 and 16 participated in this Task Group assignment: From Panel 3, Mr. Sanford E. Egesdal representing the Automatic Fire Alarm Association, Inc., Mr. Ronald E. Maassen representing the National Electrical Contractors Association, and Mr. Mark C. Ode representing Underwriters Laboratories Inc. From Panel 16, Mr. Robert W. Jensen representing the Building Industry Consulting Services International, Mr. Harold C. Ohde representing the International Brotherhood of Electrical Workers, and Mr. Joseph W. Rao representing the Independent Electrical Contractors, Inc. Mr. Richard P. Owen, the Chairman of CMP 3, representing the International Association of Electrical Inspectors, was the chairman of the Task Group.

Panel Meeting Action: Reject
Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:

"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."

This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.

Number Eligible to Vote: 15
Ballot Results: Affirmative: 13 Abstain: 2
Comment on Affirmative:
OHDE: See my Affirmative Comment on Comment 16-34.
Explanation of Abstention:
DORNA: See my Explanation of Abstention for Comment 16-34.
KAHN: See my Explanation of Abstention on Comment 16-34.

16-774 Log #1635 NEC-P16 **Final Action: Reject**
(820.51, Table 820-50, 820-53, Table 820-53 and Figure 820-53)

Submitter: Richard P. Owen, City of St. Paul, Minnesota
Comment on Proposal No: 16-177
Recommendation: Continue to Accept in Principle.
Substantiation: The Panel 3/Panel 16 Task Group, appointed by the NEC TCC, developed this comment.

The task group agrees with Panel 16's action and statement.

The NEC TCC Task Group on Correlation Issues Between Panels 3 and 16 met three times via teleconference calls. The assignment by the TCC Chairman was to attempt to develop a resolution and accompanying comments for the different actions taken on proposals dealing with similar issues by CMP 3 and CMP 16 for their respective Articles in Chapters 7 and 8 of the NEC.

The Task Group studied the issues and determined that there were five major differences in the actions on proposals concerning Articles 725, 760, 770, 800, 820, and 830. The voting on these issues was not unanimous but did pass as at least a simple majority of the Task Group.

One of the major differences involved installing air duct cables in a fabricated air duct without enclosing the cable in a metal raceway.

The Task Group members who attended the teleconference call voted to accept text that permits "air duct cable" to be installed in fabricated ducts without enclosing in an additional metal raceway or metal cable. The text to be accepted by Panel 3 is recommended to be similar to that found in Proposals 3-194 for Article 725 and 3-288 for Article 760. The "air duct cable" will replace the plenum cable that was previously acceptable in fabricated duct without enclosing in a metal raceway or metal cable assembly.

The following members of Panels 3 and 16 participated in this Task Group assignment: From Panel 3, Mr. Sanford E. Egesdal representing the Automatic Fire Alarm Association, Inc., Mr. Ronald E. Maassen representing the National Electrical Contractors Association, and Mr. Mark C. Ode representing Underwriters Laboratories Inc. From Panel 16, Mr. Robert W. Jensen representing the Building Industry Consulting Services International, Mr. Harold C. Ohde representing the International Brotherhood of Electrical Workers, and Mr. Joseph W. Rao representing the Independent Electrical Contractors, Inc. Mr. Richard P. Owen, the Chairman of CMP 3, representing the International Association of Electrical Inspectors, was the chairman of the Task Group.

Panel Meeting Action: Reject
Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:

"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."

This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.

Number Eligible to Vote: 15
Ballot Results: Affirmative: 13 Abstain: 2
Comment on Affirmative:
OHDE: See my Affirmative Comment on Comment 16-34.
Explanation of Abstention:
DORNA: See my Explanation of Abstention for Comment 16-34.
KAHN: See my Explanation of Abstention on Comment 16-34.

16-775 Log #1690 NEC-P16 **Final Action: Reject**
(820.51, Table 820-50, 820-53, Table 820-53 and Figure 820-53)

Submitter: Richard P. Owen, City of St. Paul, Minnesota
Comment on Proposal No: 16-184
Recommendation: Continue to Accept in Principle.
Substantiation: The Panel 3/Panel 16 Task Group, appointed by the NEC TCC, developed this comment.

The task group agrees with Panel 16's action and statement.

The NEC TCC Task Group on Correlation Issues Between Panels 3 and 16 met three times via teleconference calls. The assignment by the TCC Chairman was to attempt to develop a resolution and accompanying comments for the different actions taken on proposals dealing with similar issues by CMP 3 and CMP 16 for their respective Articles in Chapters 7 and 8 of the NEC.

The Task Group studied the issues and determined that there were five major differences in the actions on proposals concerning Articles 725, 760, 770, 800, 820, and 830. The voting on these issues was not unanimous but did pass as at least a simple majority of the Task Group.

One of the major differences involved installing air duct cables in a fabricated air duct without enclosing the cable in a metal raceway.

The Task Group members who attended the teleconference call voted to accept text that permits "air duct cable" to be installed in fabricated ducts without enclosing in an additional metal raceway or metal cable. The text to be accepted by Panel 3 is recommended to be similar to that found in Proposals 3-194 for Article 725 and 3-288 for Article 760. The "air duct cable" will replace the plenum cable that was previously acceptable in fabricated duct without enclosing in a metal raceway or metal cable assembly.

The following members of Panels 3 and 16 participated in this Task Group assignment: From Panel 3, Mr. Sanford E. Egesdal representing the Automatic Fire Alarm Association, Inc., Mr. Ronald E. Maassen representing

the National Electrical Contractors Association, and Mr. Mark C. Ode representing Underwriters Laboratories Inc. From Panel 16, Mr. Robert W. Jensen representing the Building Industry Consulting Services International, Mr. Harold C. Ohde representing the International Brotherhood of Electrical Workers, and Mr. Joseph W. Rao representing the Independent Electrical Contractors, Inc. Mr. Richard P. Owen, the Chairman of CMP 3, representing the International Association of Electrical Inspectors, was the chairman of the Task Group.

Panel Meeting Action: Reject

Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:

"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."

This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.

Number Eligible to Vote: 15

Ballot Results: Affirmative: 13 Abstain: 2

Comment on Affirmative:

OHDE: See my Affirmative Comment on Comment 16-34.

Explanation of Abstention:

DORNA: See my Explanation of Abstention for Comment 16-34.

KAHN: See my Explanation of Abstention on Comment 16-34.

16-776 Log #1694 NEC-P16 **Final Action: Reject**

(820.51, Table 820-50, 820-53, Table 820-53 and Figure 820-53)

Submitter: Richard P. Owen, City of St. Paul, Minnesota

Comment on Proposal No: 16-173

Recommendation: Continue to Accept this Proposal in Principle.

Substantiation: The Panel 3/Panel 16 Task Group, appointed by the NEC TCC, developed this comment.

The task group agrees with Panel 16's action and statement.

The NEC TCC Task Group on Correlation Issues Between Panels 3 and 16 met three times via teleconference calls. The assignment by the TCC Chairman was to attempt to develop a resolution and accompanying comments for the different actions taken on proposals dealing with similar issues by CMP 3 and CMP 16 for their respective Articles in Chapters 7 and 8 of the NEC.

The Task Group studied the issues and determined that there were five major differences in the actions on proposals concerning Articles 725, 760, 770, 800, 820, and 830. The voting on these issues was not unanimous but did pass as at least a simple majority of the Task Group.

One of the major differences involved installing air duct cables in a fabricated air duct without enclosing the cable in a metal raceway.

The Task Group members who attended the teleconference call voted to accept text that permits "air duct cable" to be installed in fabricated ducts without enclosing in an additional metal raceway or metal cable. The text to be accepted by Panel 3 is recommended to be similar to that found in Proposals 3-194 for Article 725 and 3-288 for Article 760. The "air duct cable" will replace the plenum cable that was previously acceptable in fabricated duct without enclosing in a metal raceway or metal cable assembly.

The following members of Panels 3 and 16 participated in this Task Group assignment: From Panel 3, Mr. Sanford E. Egesdal representing the Automatic Fire Alarm Association, Inc., Mr. Ronald E. Maassen representing the National Electrical Contractors Association, and Mr. Mark C. Ode representing Underwriters Laboratories Inc. From Panel 16, Mr. Robert W. Jensen representing the Building Industry Consulting Services International, Mr. Harold C. Ohde representing the International Brotherhood of Electrical Workers, and Mr. Joseph W. Rao representing the Independent Electrical Contractors, Inc. Mr. Richard P. Owen, the Chairman of CMP 3, representing the International Association of Electrical Inspectors, was the chairman of the Task Group.

Panel Meeting Action: Reject

Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:

"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."

This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.

Number Eligible to Vote: 15

Ballot Results: Affirmative: 13 Abstain: 2

Comment on Affirmative:

OHDE: See my Affirmative Comment on Comment 16-34.

Explanation of Abstention:

DORNA: See my Explanation of Abstention for Comment 16-34.

KAHN: See my Explanation of Abstention on Comment 16-34.

16-777 Log #1697 NEC-P16 **Final Action: Reject**

(820.51, Table 820-50, 820-53, Table 820-53 and Figure 820-53)

Submitter: Richard P. Owen, City of St. Paul, Minnesota

Comment on Proposal No: 16-178

Recommendation: Continue to Accept in Principle.

Substantiation: The Panel 3/Panel 16 Task Group, appointed by the NEC TCC, developed this comment.

The task group agrees with Panel 16's action and statement.

The NEC TCC Task Group on Correlation Issues Between Panels 3 and 16 met three times via teleconference calls. The assignment by the TCC Chairman was to attempt to develop a resolution and accompanying comments for the different actions taken on proposals dealing with similar issues by CMP 3 and CMP 16 for their respective Articles in Chapters 7 and 8 of the NEC.

The Task Group studied the issues and determined that there were five major differences in the actions on proposals concerning Articles 725, 760, 770, 800, 820, and 830. The voting on these issues was not unanimous but did pass as at least a simple majority of the Task Group.

One of the major differences involved installing air duct cables in a fabricated air duct without enclosing the cable in a metal raceway.

The Task Group members who attended the teleconference call voted to accept text that permits "air duct cable" to be installed in fabricated ducts without enclosing in an additional metal raceway or metal cable. The text to be accepted by Panel 3 is recommended to be similar to that found in Proposals 3-194 for Article 725 and 3-288 for Article 760. The "air duct cable" will replace the plenum cable that was previously acceptable in fabricated duct without enclosing in a metal raceway or metal cable assembly.

The following members of Panels 3 and 16 participated in this Task Group assignment: From Panel 3, Mr. Sanford E. Egesdal representing the Automatic Fire Alarm Association, Inc., Mr. Ronald E. Maassen representing the National Electrical Contractors Association, and Mr. Mark C. Ode representing Underwriters Laboratories Inc. From Panel 16, Mr. Robert W. Jensen representing the Building Industry Consulting Services International, Mr. Harold C. Ohde representing the International Brotherhood of Electrical Workers, and Mr. Joseph W. Rao representing the Independent Electrical Contractors, Inc. Mr. Richard P. Owen, the Chairman of CMP 3, representing the International Association of Electrical Inspectors, was the chairman of the Task Group.

Panel Meeting Action: Reject

Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:

"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."

This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.

Number Eligible to Vote: 15

Ballot Results: Affirmative: 13 Abstain: 2

Comment on Affirmative:

OHDE: See my Affirmative Comment on Comment 16-34.

Explanation of Abstention:

DORNA: See my Explanation of Abstention for Comment 16-34.

KAHN: See my Explanation of Abstention on Comment 16-34.

16-778 Log #1700 NEC-P16 **Final Action: Reject**

(820.51, Table 820-50, 820-53, Table 820-53 and Figure 820-53)

Submitter: Richard P. Owen, City of St. Paul, Minnesota

Comment on Proposal No: 16-179

Recommendation: Continue to Accept in Principle.

Substantiation: The Panel 3/Panel 16 Task Group, appointed by the NEC TCC, developed this comment.

The task group agrees with Panel 16's action and statement.

The NEC TCC Task Group on Correlation Issues Between Panels 3 and 16 met three times via teleconference calls. The assignment by the TCC

Chairman was to attempt to develop a resolution and accompanying comments for the different actions taken on proposals dealing with similar issues by CMP 3 and CMP 16 for their respective Articles in Chapters 7 and 8 of the NEC.

The Task Group studied the issues and determined that there were five major differences in the actions on proposals concerning Articles 725, 760, 770, 800, 820, and 830. The voting on these issues was not unanimous but did pass as at least a simple majority of the Task Group.

One of the major differences involved installing air duct cables in a fabricated air duct without enclosing the cable in a metal raceway.

The Task Group members who attended the teleconference call voted to accept text that permits "air duct cable" to be installed in fabricated ducts without enclosing in an additional metal raceway or metal cable. The text to be accepted by Panel 3 is recommended to be similar to that found in Proposals 3-194 for Article 725 and 3-288 for Article 760. The "air duct cable" will replace the plenum cable that was previously acceptable in fabricated duct without enclosing in a metal raceway or metal cable assembly.

The following members of Panels 3 and 16 participated in this Task Group assignment: From Panel 3, Mr. Sanford E. Egesdal representing the Automatic Fire Alarm Association, Inc., Mr. Ronald E. Maassen representing the National Electrical Contractors Association, and Mr. Mark C. Ode representing Underwriters Laboratories Inc. From Panel 16, Mr. Robert W. Jensen representing the Building Industry Consulting Services International, Mr. Harold C. Ohde representing the International Brotherhood of Electrical Workers, and Mr. Joseph W. Rao representing the Independent Electrical Contractors, Inc. Mr. Richard P. Owen, the Chairman of CMP 3, representing the International Association of Electrical Inspectors, was the chairman of the Task Group.

Panel Meeting Action: Reject

Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:

"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."

This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.

Number Eligible to Vote: 15

Ballot Results: Affirmative: 13 Abstain: 2

Comment on Affirmative:

OHDE: See my Affirmative Comment on Comment 16-34.

Explanation of Abstention:

DORNA: See my Explanation of Abstention for Comment 16-34.

KAHN: See my Explanation of Abstention on Comment 16-34.

16-779 Log #1702 NEC-P16 **Final Action: Reject**
(820.51, Table 820-50, 820-53, Table 820-53 and Figure 820-53)

Submitter: Richard P. Owen, City of St. Paul, Minnesota

Comment on Proposal No: 16-181

Recommendation: Continue to Accept in Principle.

Substantiation: The Panel 3/Panel 16 Task Group, appointed by the NEC TCC, developed this comment.

The task group agrees with Panel 16's action and statement.

The NEC TCC Task Group on Correlation Issues Between Panels 3 and 16 met three times via teleconference calls. The assignment by the TCC Chairman was to attempt to develop a resolution and accompanying comments for the different actions taken on proposals dealing with similar issues by CMP 3 and CMP 16 for their respective Articles in Chapters 7 and 8 of the NEC.

The Task Group studied the issues and determined that there were five major differences in the actions on proposals concerning Articles 725, 760, 770, 800, 820, and 830. The voting on these issues was not unanimous but did pass as at least a simple majority of the Task Group.

One of the major differences involved installing air duct cables in a fabricated air duct without enclosing the cable in a metal raceway.

The Task Group members who attended the teleconference call voted to accept text that permits "air duct cable" to be installed in fabricated ducts without enclosing in an additional metal raceway or metal cable. The text to be accepted by Panel 3 is recommended to be similar to that found in Proposals 3-194 for Article 725 and 3-288 for Article 760. The "air duct cable" will replace the plenum cable that was previously acceptable in fabricated duct without enclosing in a metal raceway or metal cable assembly.

The following members of Panels 3 and 16 participated in this Task Group assignment: From Panel 3, Mr. Sanford E. Egesdal representing the Automatic Fire Alarm Association, Inc., Mr. Ronald E. Maassen representing the National Electrical Contractors Association, and Mr. Mark C. Ode representing Underwriters Laboratories Inc. From Panel 16, Mr. Robert W. Jensen representing the Building Industry Consulting Services International, Mr. Harold C. Ohde representing the International Brotherhood of Electrical Workers, and Mr. Joseph W. Rao representing the Independent Electrical Contractors, Inc. Mr. Richard P. Owen, the Chairman of CMP 3, representing the International Association of Electrical Inspectors, was the chairman of the Task Group.

Panel Meeting Action: Reject

Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:

"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."

This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.

Number Eligible to Vote: 15

Ballot Results: Affirmative: 13 Abstain: 2

Comment on Affirmative:

OHDE: See my Affirmative Comment on Comment 16-34.

Explanation of Abstention:

DORNA: See my Explanation of Abstention for Comment 16-34.

KAHN: See my Explanation of Abstention on Comment 16-34.

16-780 Log #1705 NEC-P16 **Final Action: Reject**
(820.51, Table 820-50, 820-53, Table 820-53 and Figure 820-53)

Submitter: Richard P. Owen, City of St. Paul, Minnesota

Comment on Proposal No: 16-183

Recommendation: Continue to Accept in Principle.

Substantiation: The Panel 3/Panel 16 Task Group, appointed by the NEC TCC, developed this comment.

The task group agrees with Panel 16's action and statement.

The NEC TCC Task Group on Correlation Issues Between Panels 3 and 16 met three times via teleconference calls. The assignment by the TCC Chairman was to attempt to develop a resolution and accompanying comments for the different actions taken on proposals dealing with similar issues by CMP 3 and CMP 16 for their respective Articles in Chapters 7 and 8 of the NEC.

The Task Group studied the issues and determined that there were five major differences in the actions on proposals concerning Articles 725, 760, 770, 800, 820, and 830. The voting on these issues was not unanimous but did pass as at least a simple majority of the Task Group.

One of the major differences involved installing air duct cables in a fabricated air duct without enclosing the cable in a metal raceway.

The Task Group members who attended the teleconference call voted to accept text that permits "air duct cable" to be installed in fabricated ducts without enclosing in an additional metal raceway or metal cable. The text to be accepted by Panel 3 is recommended to be similar to that found in Proposals 3-194 for Article 725 and 3-288 for Article 760. The "air duct cable" will replace the plenum cable that was previously acceptable in fabricated duct without enclosing in a metal raceway or metal cable assembly.

The following members of Panels 3 and 16 participated in this Task Group assignment: From Panel 3, Mr. Sanford E. Egesdal representing the Automatic Fire Alarm Association, Inc., Mr. Ronald E. Maassen representing the National Electrical Contractors Association, and Mr. Mark C. Ode representing Underwriters Laboratories Inc. From Panel 16, Mr. Robert W. Jensen representing the Building Industry Consulting Services International, Mr. Harold C. Ohde representing the International Brotherhood of Electrical Workers, and Mr. Joseph W. Rao representing the Independent Electrical Contractors, Inc. Mr. Richard P. Owen, the Chairman of CMP 3, representing the International Association of Electrical Inspectors, was the chairman of the Task Group.

Panel Meeting Action: Reject

Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:

"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."

This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.
Number Eligible to Vote: 15
Ballot Results: Affirmative: 13 Abstain: 2
Comment on Affirmative:
OHDE: See my Affirmative Comment on Comment 16-34.
Explanation of Abstention:
DORNA: See my Explanation of Abstention for Comment 16-34.
KAHN: See my Explanation of Abstention on Comment 16-34.

16-781 Log #2501 NEC-P16 **Final Action: Accept**
(820.51, Table 820-50, 820-53, Table 820-53 and Figure 820-53)

Note: See the Technical Correlating Committee Note on Comment 16-701.
Submitter: William A. Wolfe, Steel Tube Institute of North America
Comment on Proposal No: 16-173
Recommendation: Reject this proposal.
Substantiation: See our companion proposal on 16-37.
Panel Meeting Action: Accept
Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:
"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."
This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.
Number Eligible to Vote: 15
Ballot Results: Affirmative: 13 Abstain: 2
Comment on Affirmative:
OHDE: See my Affirmative Comment on Comment 16-34.
Explanation of Abstention:
DORNA: See my Explanation of Abstention for Comment 16-34.
KAHN: See my Explanation of Abstention on Comment 16-34.

16-782 Log #2505 NEC-P16 **Final Action: Accept**
(820.51, Table 820-50, 820-53, Table 820-53 and Figure 820-53)

Note: See the Technical Correlating Committee Note on Comment 16-701.
Submitter: William A. Wolfe, Steel Tube Institute of North America
Comment on Proposal No: 16-177
Recommendation: Reject this proposal.
Substantiation: See our companion proposal on 16-37.

Panel Meeting Action: Accept
Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:
"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."
This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.
Number Eligible to Vote: 15
Ballot Results: Affirmative: 13 Abstain: 2
Comment on Affirmative:
OHDE: See my Affirmative Comment on Comment 16-34.
Explanation of Abstention:
DORNA: See my Explanation of Abstention for Comment 16-34.
KAHN: See my Explanation of Abstention on Comment 16-34.

16-783 Log #2508 NEC-P16 **Final Action: Accept**
(820.51, Table 820-50, 820-53, Table 820-53 and Figure 820-53)

Note: See the Technical Correlating Committee Note on Comment 16-701.
Submitter: William A. Wolfe, Steel Tube Institute of North America
Comment on Proposal No: 16-178
Recommendation: Reject this proposal.
Substantiation: See our companion proposal on 16-37.
Panel Meeting Action: Accept
Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:
"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."
This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.
Number Eligible to Vote: 15
Ballot Results: Affirmative: 13 Abstain: 2
Comment on Affirmative:
OHDE: See my Affirmative Comment on Comment 16-34.
Explanation of Abstention:
DORNA: See my Explanation of Abstention for Comment 16-34.
KAHN: See my Explanation of Abstention on Comment 16-34.

16-784 Log #2509 NEC-P16 **Final Action: Accept**
(820.51, Table 820-50, 820-53, Table 820-53 and Figure 820-53)

Note: See the Technical Correlating Committee Note on Comment 16-701.
Submitter: William A. Wolfe, Steel Tube Institute of North America
Comment on Proposal No: 16-179
Recommendation: Reject this proposal.
Substantiation: See our companion proposal on 16-37.
Panel Meeting Action: Accept
Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:
"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."
This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.
Number Eligible to Vote: 15
Ballot Results: Affirmative: 13 Abstain: 2
Comment on Affirmative:
OHDE: See my Affirmative Comment on Comment 16-34.
Explanation of Abstention:
DORNA: See my Explanation of Abstention for Comment 16-34.
KAHN: See my Explanation of Abstention on Comment 16-34.

16-785 Log #2510 NEC-P16 **Final Action: Accept**
(820.51, Table 820-50, 820-53, Table 820-53 and Figure 820-53)

Note: See the Technical Correlating Committee Note on Comment 16-701.
Submitter: William A. Wolfe, Steel Tube Institute of North America
Comment on Proposal No: 16-181
Recommendation: Reject this proposal.
Substantiation: See our companion proposal on 16-37.
Panel Meeting Action: Accept
Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:
"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."
This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.
Number Eligible to Vote: 15
Ballot Results: Affirmative: 13 Abstain: 2
Comment on Affirmative:
OHDE: See my Affirmative Comment on Comment 16-34.
Explanation of Abstention:
DORNA: See my Explanation of Abstention for Comment 16-34.
KAHN: See my Explanation of Abstention on Comment 16-34.

16-786 Log #2511 NEC-P16 **Final Action: Accept**
(820.51, Table 820-50, 820-53, Table 820-53 and Figure 820-53)

Note: See the Technical Correlating Committee Note on Comment 16-701.
Submitter: William A. Wolfe, Steel Tube Institute of North America
Comment on Proposal No: 16-184
Recommendation: Reject this proposal.
Substantiation: See our companion proposal on 16-37.
Panel Meeting Action: Accept
Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:
"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."
This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.
Number Eligible to Vote: 15
Ballot Results: Affirmative: 13 Abstain: 2
Comment on Affirmative:
OHDE: See my Affirmative Comment on Comment 16-34.
Explanation of Abstention:
DORNA: See my Explanation of Abstention for Comment 16-34.
KAHN: See my Explanation of Abstention on Comment 16-34.

16-787 Log #2830 NEC-P16 **Final Action: Reject**
(820.51, Table 820-50, 820-53, Table 820-53 and Figure 820-53)

Submitter: Richard P. Owen, City of St. Paul, Minnesota
Comment on Proposal No: 16-184
Recommendation: Continue to accept in principle.
Substantiation: The Panel 3/Panel 16 Task Group, appointed by the NEC TCC, developed this comment.
The task group agrees with Panel 16's action and statement.
The NEC TCC Task Group on Correlation Issues Between Panels 3 and 16 met three times via teleconference calls. The assignment by the TCC Chairman was to attempt to develop a resolution and accompanying comments for the different actions taken on proposals dealing with similar issues by CMP 3 and CMP 16 for their respective Articles in Chapters 7 and 8 of the NEC.
The Task Group studied the issues and determined that there were five major differences in the actions on proposals concerning Articles 725, 760, 770, 800, 820, and 830. The voting on these issues was not unanimous but did pass as at least a simple majority of the Task Group.
One of the major differences involved installing air duct cables in a fabricated air duct without enclosing the cable in a metal raceway.
The Task Group members who attended the teleconference call voted to accept text that permits "air duct cable" to be installed in fabricated ducts without enclosing in an additional metal raceway or metal cable. The text to be accepted by Panel 3 is recommended to be similar to that found in Proposals 3-194 for Article 725 and 3-288 for Article 760. The "air duct cable" will replace the plenum cable that was previously acceptable in fabricated duct without enclosing in a metal raceway or metal cable assembly.
The following members of Panels 3 and 16 participated in this Task Group assignment: From Panel 3, Mr. Sanford E. Egesdal representing the Automatic Fire Alarm Association, Inc., Mr. Ronald E. Maassen representing the National Electrical Contractors Association, and Mr. Mark C. Ode representing Underwriters Laboratories Inc. From Panel 16, Mr. Robert W. Jensen representing the Building Industry Consulting Services International, Mr. Harold C. Ohde representing the International Brotherhood of Electrical Workers, and Mr. Joseph W. Rao representing the Independent Electrical Contractors, Inc. Mr. Richard P. Owen, the Chairman of CMP 3, representing the International Association of Electrical Inspectors, was the chairman of the Task Group.
Panel Meeting Action: Reject
Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:
"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."
This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.
Number Eligible to Vote: 15
Ballot Results: Affirmative: 13 Abstain: 2
Comment on Affirmative:
OHDE: See my Affirmative Comment on Comment 16-34.
Explanation of Abstention:
DORNA: See my Explanation of Abstention for Comment 16-34.
KAHN: See my Explanation of Abstention on Comment 16-34.

16-788 Log #2832 NEC-P16 **Final Action: Reject**
(820.51, Table 820-50, 820-53, Table 820-53 and Figure 820-53)

Submitter: Richard P. Owen, City of St. Paul, Minnesota
Comment on Proposal No: 16-173
Recommendation: Continue to accept this proposal in principle.
Substantiation: The Panel 3/Panel 16 Task Group, appointed by the NEC TCC, developed this comment.
The task group agrees with Panel 16's action and statement.
The NEC TCC Task Group on Correlation Issues Between Panels 3 and 16 met three times via teleconference calls. The assignment by the TCC Chairman was to attempt to develop a resolution and accompanying comments for the different actions taken on proposals dealing with similar issues by CMP 3 and CMP 16 for their respective Articles in Chapters 7 and 8 of the NEC.
The Task Group studied the issues and determined that there were five major differences in the actions on proposals concerning Articles 725, 760, 770, 800, 820, and 830. The voting on these issues was not unanimous but did pass as at least a simple majority of the Task Group.
One of the major differences involved installing air duct cables in a fabricated air duct without enclosing the cable in a metal raceway.
The Task Group members who attended the teleconference call voted to accept text that permits "air duct cable" to be installed in fabricated ducts without enclosing in an additional metal raceway or metal cable. The text to be accepted by Panel 3 is recommended to be similar to that found in Proposals 3-194 for Article 725 and 3-288 for Article 760. The "air duct cable" will replace the plenum cable that was previously acceptable in fabricated duct without enclosing in a metal raceway or metal cable assembly.
The following members of Panels 3 and 16 participated in this Task Group assignment: From Panel 3, Mr. Sanford E. Egesdal representing the Automatic Fire Alarm Association, Inc., Mr. Ronald E. Maassen representing the National Electrical Contractors Association, and Mr. Mark C. Ode representing Underwriters Laboratories Inc. From Panel 16, Mr. Robert W. Jensen representing the Building Industry Consulting Services International, Mr. Harold C. Ohde representing the International Brotherhood of Electrical Workers, and Mr. Joseph W. Rao representing the Independent Electrical Contractors, Inc. Mr. Richard P. Owen, the Chairman of CMP 3, representing the International Association of Electrical Inspectors, was the chairman of the Task Group.
Panel Meeting Action: Reject
Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:
"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."
This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.
Number Eligible to Vote: 15
Ballot Results: Affirmative: 13 Abstain: 2
Comment on Affirmative:
OHDE: See my Affirmative Comment on Comment 16-34.
Explanation of Abstention:
DORNA: See my Explanation of Abstention for Comment 16-34.
KAHN: See my Explanation of Abstention on Comment 16-34.

16-789 Log #2834 NEC-P16 **Final Action: Reject**
(820.51, Table 820-50, 820-53, Table 820-53 and Figure 820-53)

Submitter: Richard P. Owen, City of St. Paul, Minnesota
Comment on Proposal No: 16-178
Recommendation: Continue to accept in principle.
Substantiation: The Panel 3/Panel 16 Task Group, appointed by the NEC TCC, developed this comment.
The task group agrees with Panel 16's action and statement.
The NEC TCC Task Group on Correlation Issues Between Panels 3 and 16 met three times via teleconference calls. The assignment by the TCC Chairman was to attempt to develop a resolution and accompanying comments for the different actions taken on proposals dealing with similar issues by CMP

3 and CMP 16 for their respective Articles in Chapters 7 and 8 of the NEC.

The Task Group studied the issues and determined that there were five major differences in the actions on proposals concerning Articles 725, 760, 770, 800, 820, and 830. The voting on these issues was not unanimous but did pass as at least a simple majority of the Task Group.

One of the major differences involved installing air duct cables in a fabricated air duct without enclosing the cable in a metal raceway.

The Task Group members who attended the teleconference call voted to accept text that permits "air duct cable" to be installed in fabricated ducts without enclosing in an additional metal raceway or metal cable. The text to be accepted by Panel 3 is recommended to be similar to that found in Proposals 3-194 for Article 725 and 3-288 for Article 760. The "air duct cable" will replace the plenum cable that was previously acceptable in fabricated duct without enclosing in a metal raceway or metal cable assembly.

The following members of Panels 3 and 16 participated in this Task Group assignment: From Panel 3, Mr. Sanford E. Egesdal representing the Automatic Fire Alarm Association, Inc., Mr. Ronald E. Maassen representing the National Electrical Contractors Association, and Mr. Mark C. Ode representing Underwriters Laboratories Inc. From Panel 16, Mr. Robert W. Jensen representing the Building Industry Consulting Services International, Mr. Harold C. Ohde representing the International Brotherhood of Electrical Workers, and Mr. Joseph W. Rao representing the Independent Electrical Contractors, Inc. Mr. Richard P. Owen, the Chairman of CMP 3, representing the International Association of Electrical Inspectors, was the chairman of the Task Group.

Panel Meeting Action: Reject

Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:

"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."

This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.

Number Eligible to Vote: 15

Ballot Results: Affirmative: 13 Abstain: 2

Comment on Affirmative:

OHDE: See my Affirmative Comment on Comment 16-34.

Explanation of Abstention:

DORNA: See my Explanation of Abstention for Comment 16-34.

KAHN: See my Explanation of Abstention on Comment 16-34.

16-790 Log #2839 NEC-P16 **Final Action: Reject**
(820.51, Table 820-50, 820-53, Table 820-53 and Figure 820-53)

Submitter: Richard P. Owen, City of St. Paul, Minnesota

Comment on Proposal No: 16-179

Recommendation: Continue to accept in principle.

Substantiation: The Panel 3/Panel 16 Task Group, appointed by the NEC TCC, developed this comment.

The task group agrees with Panel 16's action and statement.

The NEC TCC Task Group on Correlation Issues Between Panels 3 and 16 met three times via teleconference calls. The assignment by the TCC Chairman was to attempt to develop a resolution and accompanying comments for the different actions taken on proposals dealing with similar issues by CMP 3 and CMP 16 for their respective Articles in Chapters 7 and 8 of the NEC.

The Task Group studied the issues and determined that there were five major differences in the actions on proposals concerning Articles 725, 760, 770, 800, 820, and 830. The voting on these issues was not unanimous but did pass as at least a simple majority of the Task Group.

One of the major differences involved installing air duct cables in a fabricated air duct without enclosing the cable in a metal raceway.

The Task Group members who attended the teleconference call voted to accept text that permits "air duct cable" to be installed in fabricated ducts without enclosing in an additional metal raceway or metal cable. The text to be accepted by Panel 3 is recommended to be similar to that found in Proposals 3-194 for Article 725 and 3-288 for Article 760. The "air duct cable" will replace the plenum cable that was previously acceptable in fabricated duct without enclosing in a metal raceway or metal cable assembly.

The following members of Panels 3 and 16 participated in this Task Group assignment: From Panel 3, Mr. Sanford E. Egesdal representing the Automatic Fire Alarm Association, Inc., Mr. Ronald E. Maassen representing the National Electrical Contractors Association, and Mr. Mark C. Ode representing Underwriters Laboratories Inc. From Panel 16, Mr. Robert W. Jensen representing the Building Industry Consulting Services International, Mr. Harold C. Ohde representing the International Brotherhood of Electrical Workers, and Mr. Joseph W. Rao representing the Independent Electrical Contractors, Inc. Mr. Richard P. Owen, the Chairman of CMP 3, representing the International Association of Electrical Inspectors, was the chairman of the Task Group.

Panel Meeting Action: Reject

Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:

"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."

This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.

Number Eligible to Vote: 15

Ballot Results: Affirmative: 13 Abstain: 2

Comment on Affirmative:

OHDE: See my Affirmative Comment on Comment 16-34.

Explanation of Abstention:

DORNA: See my Explanation of Abstention for Comment 16-34.

KAHN: See my Explanation of Abstention on Comment 16-34.

16-791 Log #2842 NEC-P16 **Final Action: Reject**
(820.51, Table 820-50, 820-53, Table 820-53 and Figure 820-53)

Submitter: Richard P. Owen, City of St. Paul, Minnesota

Comment on Proposal No: 16-181

Recommendation: Continue to accept in principle.

Substantiation: The Panel 3/Panel 16 Task Group, appointed by the NEC TCC, developed this comment.

The task group agrees with Panel 16's action and statement.

The NEC TCC Task Group on Correlation Issues Between Panels 3 and 16 met three times via teleconference calls. The assignment by the TCC Chairman was to attempt to develop a resolution and accompanying comments for the different actions taken on proposals dealing with similar issues by CMP 3 and CMP 16 for their respective Articles in Chapters 7 and 8 of the NEC.

The Task Group studied the issues and determined that there were five major differences in the actions on proposals concerning Articles 725, 760, 770, 800, 820, and 830. The voting on these issues was not unanimous but did pass as at least a simple majority of the Task Group.

One of the major differences involved installing air duct cables in a fabricated air duct without enclosing the cable in a metal raceway.

The Task Group members who attended the teleconference call voted to accept text that permits "air duct cable" to be installed in fabricated ducts without enclosing in an additional metal raceway or metal cable. The text to be accepted by Panel 3 is recommended to be similar to that found in Proposals 3-194 for Article 725 and 3-288 for Article 760. The "air duct cable" will replace the plenum cable that was previously acceptable in fabricated duct without enclosing in a metal raceway or metal cable assembly.

The following members of Panels 3 and 16 participated in this Task Group assignment: From Panel 3, Mr. Sanford E. Egesdal representing the Automatic Fire Alarm Association, Inc., Mr. Ronald E. Maassen representing the National Electrical Contractors Association, and Mr. Mark C. Ode representing Underwriters Laboratories Inc. From Panel 16, Mr. Robert W. Jensen representing the Building Industry Consulting Services International, Mr. Harold C. Ohde representing the International Brotherhood of Electrical Workers, and Mr. Joseph W. Rao representing the Independent Electrical Contractors, Inc. Mr. Richard P. Owen, the Chairman of CMP 3, representing the International Association of Electrical Inspectors, was the chairman of the Task Group.

Panel Meeting Action: Reject

Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:

"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."

This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.

Number Eligible to Vote: 15

Ballot Results: Affirmative: 13 Abstain: 2

Comment on Affirmative:
OHDE: See my Affirmative Comment on Comment 16-34.
Explanation of Abstention:
DORNA: See my Explanation of Abstention for Comment 16-34.
KAHN: See my Explanation of Abstention on Comment 16-34.

16-792 Log #2846 NEC-P16 **Final Action: Reject**
(820.51, Table 820-50, 820-53, Table 820-53 and Figure 820-53)

Submitter: Richard P. Owen, City of St. Paul, Minnesota
Comment on Proposal No: 16-183
Recommendation: Continue to accept in principle.
Substantiation: The Panel 3/Panel 16 Task Group, appointed by the NEC TCC, developed this comment.

The task group agrees with Panel 16's action and statement.

The NEC TCC Task Group on Correlation Issues Between Panels 3 and 16 met three times via teleconference calls. The assignment by the TCC Chairman was to attempt to develop a resolution and accompanying comments for the different actions taken on proposals dealing with similar issues by CMP 3 and CMP 16 for their respective Articles in Chapters 7 and 8 of the NEC.

The Task Group studied the issues and determined that there were five major differences in the actions on proposals concerning Articles 725, 760, 770, 800, 820, and 830. The voting on these issues was not unanimous but did pass as at least a simple majority of the Task Group.

One of the major differences involved installing air duct cables in a fabricated air duct without enclosing the cable in a metal raceway.

The Task Group members who attended the teleconference call voted to accept text that permits "air duct cable" to be installed in fabricated ducts without enclosing in an additional metal raceway or metal cable. The text to be accepted by Panel 3 is recommended to be similar to that found in Proposals 3-194 for Article 725 and 3-288 for Article 760. The "air duct cable" will replace the plenum cable that was previously acceptable in fabricated duct without enclosing in a metal raceway or metal cable assembly.

The following members of Panels 3 and 16 participated in this Task Group assignment: From Panel 3, Mr. Sanford E. Egesdal representing the Automatic Fire Alarm Association, Inc., Mr. Ronald E. Maassen representing the National Electrical Contractors Association, and Mr. Mark C. Ode representing Underwriters Laboratories Inc. From Panel 16, Mr. Robert W. Jensen representing the Building Industry Consulting Services International, Mr. Harold C. Ohde representing the International Brotherhood of Electrical Workers, and Mr. Joseph W. Rao representing the Independent Electrical Contractors, Inc. Mr. Richard P. Owen, the Chairman of CMP 3, representing the International Association of Electrical Inspectors, was the chairman of the Task Group.
Panel Meeting Action: Reject
Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:

"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."

This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.
Number Eligible to Vote: 15
Ballot Results: Affirmative: 13 Abstain: 2
Comment on Affirmative:
OHDE: See my Affirmative Comment on Comment 16-34.
Explanation of Abstention:
DORNA: See my Explanation of Abstention for Comment 16-34.
KAHN: See my Explanation of Abstention on Comment 16-34.

16-793 Log #1799 NEC-P16 **Final Action: Reject**
(820.51, Table 820.50, 820.53(A), Table 820.53)

Submitter: Richard P. Owen, City of St. Paul, Minnesota
Comment on Proposal No: 16-174
Recommendation: The panel action on this proposal should be changed to Accept in Principle.
Substantiation: The Panel 3/Panel 16 Task Group, appointed by the NEC TCC, developed this comment.

Panel 16 accepted the listing of duct cable in Proposal 16-177, which the submitter requested in proposal 16-174.

The NEC TCC Task Group on Correlation Issues Between Panels 3 and 16 met three times via teleconference calls. The assignment by the TCC Chairman was to attempt to develop a resolution and accompanying comments for the different actions taken on proposals dealing with similar issues by CMP 3 and CMP 16 for their respective Articles in Chapters 7 and 8 of the NEC.

The Task Group studied the issues and determined that there were five major differences in the actions on proposals concerning Articles 725, 760, 770, 800, 820, and 830. The voting on these issues was not unanimous but did pass as at least a simple majority of the Task Group.

One of the major differences involved creating a higher level of hierarchy for air duct cable. The Task Group members who were at the teleconference call recommended accepting "air duct cable" as a level "up" in the hierarchy sections and charts for all articles covered by Panels 3 and 16. The members felt that duct cable, based on all information submitted in proposals dealing with "air duct cable," had a lower burn rate and less products of combustion than plenum cable. It was also determined that building materials used for the actual air ducting would have the same fire and burn characteristics as the duct cable.

It was also felt that where air duct cable was used in a fabricated duct, the inclusion of this duct cable, as a higher level, would provide direction for installing this type of cable. The two different levels, air duct cable and plenum cable, would permit the NFPA 90A Committee to accept two different test techniques, one test for air duct cable and one for plenum cable.

The following members of Panels 3 and 16 participated in this Task Group assignment: From Panel 3, Mr. Sanford E. Egesdal representing the Automatic Fire Alarm Association, Inc., Mr. Ronald E. Maassen representing the National Electrical Contractors Association, and Mr. Mark C. Ode representing Underwriters Laboratories Inc. From Panel 16, Mr. Robert W. Jensen representing the Building Industry Consulting Services International, Mr. Harold C. Ohde representing the International Brotherhood of Electrical Workers, and Mr. Joseph W. Rao representing the Independent Electrical Contractors, Inc. Mr. Richard P. Owen, the Chairman of CMP 3, representing the International Association of Electrical Inspectors, was the chairman of the Task Group.
Panel Meeting Action: Reject
Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:

"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."

This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.
Number Eligible to Vote: 15
Ballot Results: Affirmative: 13 Abstain: 2
Comment on Affirmative:
OHDE: See my Affirmative Comment on Comment 16-34.
Explanation of Abstention:
DORNA: See my Explanation of Abstention for Comment 16-34.
KAHN: See my Explanation of Abstention on Comment 16-34.

16-794 Log #3158 NEC-P16 **Final Action: Accept**
(820.51, Table 820.50, 820.53, and Table 820.53)

Note: See the Technical Correlating Committee Note on Comment 16-701.
Submitter: Michael I. Callanan, IBEW
Comment on Proposal No: 16-172
Recommendation: Reject this proposal.
Substantiation: This proposal should be rejected as we agree with the explanation of negative of Mr. Jensen, Mr. Jones and Mr. Ohde. This comment represents the official position of the International Brotherhood of Electrical Workers Codes and Standards Committee.
Panel Meeting Action: Accept
Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:

"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."

This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.
Number Eligible to Vote: 15
Ballot Results: Affirmative: 13 Abstain: 2
Comment on Affirmative:
OHDE: See my Affirmative Comment on Comment 16-34.

Explanation of Abstention:
DORNA: See my Explanation of Abstention for Comment 16-34.
KAHN: See my Explanation of Abstention on Comment 16-34.

16-795 Log #288 NEC-P16 **Final Action: Reject**
(820.51, Table 820.50, 820.53 Table 820.53)

Submitter: Technical Committee on Air Conditioning
Comment on Proposal No: 16-174
Recommendation: Change the panel action on this proposal from reject to accept in principle.
Substantiation:NFPA 90A requires the listing of limited combustible cables. The listing requirements for air duct cables are essentially the listing requirements for limited combustible cables. The NEC needs to provide for the listing of these cables in order to correlate with NFPA 90A. The panel accepted the listing of air duct cables when it accepted proposal 16-177 in principle.
Why is the Technical Committee on Air Conditioning submitting comments?
In action 80-60, the Standards Council assigned primary jurisdiction for combustibles in plenums to the Technical Committee on Air Conditioning and directed it to seek the cooperation of the committees on Fire Tests, National Electrical Code and Safety to Life. The Technical Committee on Air Conditioning has been cooperating with the National Electrical Code Committee by submitting a series of proposals for the 2005 NEC. It now continues that cooperation by commenting on all proposals dealing with combustibles in plenums. The purpose of the proposals and comments is to bring about correlation between NFPA 70, National Electrical Code and NFPA 90A, Standard for the Installation of Air-Conditioning and Ventilating Systems. The Technical Committee on Air Conditioning established consensus on these comments through a letter ballot.
The NEC Technical Correlating Committee has acknowledged the responsibility of the Technical Committee on Air-Conditioning. The Technical Correlating Committee action on this proposal states:
"The Technical Correlating Committee understands that the Standards Council has given primary responsibility to the Technical Committee on Air-Conditioning for combustible materials in plenums in cooperation with other committees including the National Electrical Code Committee. The Chair of the Technical Correlating Committee will work with the Chair of the Technical Committee on Air-Conditioning and appoint a Task Group to review the proposals affecting correlation between Code-Making Panels 3, 16, and the Technical Committee on Air-Conditioning. In addition, the Technical Correlating Committee directs that this proposal be referred to the NFPA Committee on Air-Conditioning for comment."
NFPA 5000-2003 Building Construction and Safety Code, in Chapter 52, requires electrical systems and equipment to be designed and constructed in accordance with NFPA 70. Likewise, in Chapter 50, it requires air-conditioning and ventilating systems to be designed and constructed in accordance with NFPA 90A. NFPA 5000 has conflicting provisions for wiring in air handling spaces because of conflicts between NFPA 70 and NFPA 90A. Many of the proposals and comments from the Committee on Air-Conditioning to the National Electrical Code Committee are intended to eliminate these conflicts. These proposals and comments are part of the implementation of the Standards Council's recently issued Scope Coordination Policy for NFPA documents that has the "goal of having a coordinated set of documents for the built environment."
Panel Meeting Action: Reject
Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:
"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."
This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.
Number Eligible to Vote: 15
Ballot Results: Affirmative: 13 Abstain: 2
Comment on Affirmative:
OHDE: See my Affirmative Comment on Comment 16-34.
Explanation of Abstention:
DORNA: See my Explanation of Abstention for Comment 16-34.
KAHN: See my Explanation of Abstention on Comment 16-34.

16-796 Log #300 NEC-P16 **Final Action: Reject**
(820.51, Table 820.50, 820.53, Table 820.53)

Submitter: Technical Committee on Air Conditioning
Comment on Proposal No: 16-182
Recommendation: Continue to accept this proposal in principle.
Substantiation: See the comment from the Technical Committee on Air conditioning on proposal 16-177.
Panel Meeting Action: Reject
Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:
"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."
This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.
Number Eligible to Vote: 15
Ballot Results: Affirmative: 13 Abstain: 2
Comment on Affirmative:
OHDE: See my Affirmative Comment on Comment 16-34.
Explanation of Abstention:
DORNA: See my Explanation of Abstention for Comment 16-34.
KAHN: See my Explanation of Abstention on Comment 16-34.

16-797 Log #306 NEC-P16 **Final Action: Reject**
(820.51, Table 820.50, 820.53 Table 820.53)

Submitter: Technical Committee on Air Conditioning
Comment on Proposal No: 16-173
Recommendation: Continue to accept this proposal in principle.
Substantiation: See the comment from the Technical Committee on Air Conditioning on proposal 16-177.
Panel Meeting Action: Reject
Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:
"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."
This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.
Number Eligible to Vote: 15
Ballot Results: Affirmative: 13 Abstain: 2
Comment on Affirmative:
OHDE: See my Affirmative Comment on Comment 16-34.
Explanation of Abstention:
DORNA: See my Explanation of Abstention for Comment 16-34.
KAHN: See my Explanation of Abstention on Comment 16-34.

16-798 Log #311 NEC-P16 **Final Action: Reject**
(820.51, Table 820.50, 820.53, & Table 820.53)

Submitter: Technical Committee on Air Conditioning
Comment on Proposal No: 16-172
Recommendation: Continue to accept this proposal in principle.
Substantiation: See the comment from the Technical Committee on Air conditioning on proposal 16-177.
Panel Meeting Action: Reject
Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:

"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."

This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.

Number Eligible to Vote: 15
Ballot Results: Affirmative: 13 Abstain: 2
Comment on Affirmative:
OHDE: See my Affirmative Comment on Comment 16-34.
Explanation of Abstention:
DORNA: See my Explanation of Abstention for Comment 16-34.
KAHN: See my Explanation of Abstention on Comment 16-34.

16-799 Log #337 NEC-P16 **Final Action: Reject**
(820.51, Table 820.50, 820.53, Table 820.53)

Submitter: Technical Committee on Air Conditioning
Comment on Proposal No: 16-179
Recommendation: Continue to accept this proposal in principle.
Substantiation: See the comment from the Technical committee on Air Conditioning on proposal 16-177.
Panel Meeting Action: Reject
Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:

"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."

This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.

Number Eligible to Vote: 15
Ballot Results: Affirmative: 13 Abstain: 2
Comment on Affirmative:
OHDE: See my Affirmative Comment on Comment 16-34.
Explanation of Abstention:
DORNA: See my Explanation of Abstention for Comment 16-34.
KAHN: See my Explanation of Abstention on Comment 16-34.

16-800 Log #342 NEC-P16 **Final Action: Reject**
(820.51, Table 820.50, 820.53, Table 820.53)

Submitter: Technical Committee on Air Conditioning
Comment on Proposal No: 16-183
Recommendation: Continue to accept this proposal in principle.
Substantiation: See the comment from the Technical committee on Air Conditioning on proposal 16-177.
Panel Meeting Action: Reject
Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:

"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."

This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.

Number Eligible to Vote: 15
Ballot Results: Affirmative: 13 Abstain: 2
Comment on Affirmative:
OHDE: See my Affirmative Comment on Comment 16-34.
Explanation of Abstention:
DORNA: See my Explanation of Abstention for Comment 16-34.
KAHN: See my Explanation of Abstention on Comment 16-34.

16-801 Log #348 NEC-P16 **Final Action: Reject**
(820.51, Table 820.50, 820.53, Table 820.53)

Submitter: Technical Committee on Air Conditioning
Comment on Proposal No: 16-178
Recommendation: Continue to accept this proposal in principle.
Substantiation: See the comment from the Technical committee on Air Conditioning on proposal 16-177.
Panel Meeting Action: Reject
Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:

"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."

This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.

Number Eligible to Vote: 15
Ballot Results: Affirmative: 13 Abstain: 2
Comment on Affirmative:
OHDE: See my Affirmative Comment on Comment 16-34.
Explanation of Abstention:
DORNA: See my Explanation of Abstention for Comment 16-34.
KAHN: See my Explanation of Abstention on Comment 16-34.

16-802 Log #353 NEC-P16 **Final Action: Reject**
(820.51, Table 820.50, 820.53, Table 820.53)

Submitter: Technical Committee on Air Conditioning
Comment on Proposal No: 16-184
Recommendation: Continue to accept this proposal in principle.
Substantiation: See the comment from the Technical committee on Air Conditioning on proposal 16-177.
Panel Meeting Action: Reject
Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:

"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."

This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.

Number Eligible to Vote: 15
Ballot Results: Affirmative: 13 Abstain: 2
Comment on Affirmative:
OHDE: See my Affirmative Comment on Comment 16-34.
Explanation of Abstention:
DORNA: See my Explanation of Abstention for Comment 16-34.
KAHN: See my Explanation of Abstention on Comment 16-34.

16-803 Log #358 NEC-P16 **Final Action: Reject**
(820.51, Table 820.50, 820.53, Table 820.53)

Submitter: Technical Committee on Air Conditioning
Comment on Proposal No: 16-181
Recommendation: Continue to accept this proposal in principle.
Substantiation: See the comment from the Technical committee on Air Conditioning on proposal 16-177.
Panel Meeting Action: Reject
Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:

"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."

This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.

Number Eligible to Vote: 15
Ballot Results: Affirmative: 13 Abstain: 2
Comment on Affirmative:
OHDE: See my Affirmative Comment on Comment 16-34.
Explanation of Abstention:
DORNA: See my Explanation of Abstention for Comment 16-34.
KAHN: See my Explanation of Abstention on Comment 16-34.

16-804 Log #402 NEC-P16 **Final Action: Reject**
(820.51, Table 820.50, 820.53, Table 820.53)

Submitter: Technical Committee on Air Conditioning
Comment on Proposal No: 16-176
Recommendation: Continue to accept this proposal in principle.
Substantiation: See the comment from the Technical Committee on Air Conditioning on proposal 16-177.
Panel Meeting Action: Reject
Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:
"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."
This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.
Number Eligible to Vote: 15
Ballot Results: Affirmative: 13 Abstain: 2
Comment on Affirmative:
OHDE: See my Affirmative Comment on Comment 16-34.
Explanation of Abstention:
DORNA: See my Explanation of Abstention for Comment 16-34.
KAHN: See my Explanation of Abstention on Comment 16-34.

16-805 Log #2758 NEC-P16 **Final Action: Reject**
(820.51, Table 820.50, 820.53, Table 820.53)

Submitter: Richard Fransen, Daikin America, Inc. / Rep. Cable Fire Research Association
Comment on Proposal No: 16-172
Recommendation: Continue to accept this proposal in principle.
Substantiation: See the comment from CFRA on proposal 16-177.
Panel Meeting Action: Reject
Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:
"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."
This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.
Number Eligible to Vote: 15
Ballot Results: Affirmative: 13 Abstain: 2
Comment on Affirmative:
OHDE: See my Affirmative Comment on Comment 16-34.
Explanation of Abstention:
DORNA: See my Explanation of Abstention for Comment 16-34.
KAHN: See my Explanation of Abstention on Comment 16-34.

16-806 Log #2759 NEC-P16 **Final Action: Reject**
(820.51, Table 820.50, 820.53, Table 820.53)

Submitter: Richard Fransen, Daikin America, Inc. / Rep. Cable Fire Research Association
Comment on Proposal No: 16-173
Recommendation: Continue to accept this proposal in principle.
Substantiation: See the comment from CFRA on proposal 16-177.
Panel Meeting Action: Reject
Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:
"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."
This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.
Number Eligible to Vote: 15
Ballot Results: Affirmative: 13 Abstain: 2
Comment on Affirmative:
OHDE: See my Affirmative Comment on Comment 16-34.
Explanation of Abstention:
DORNA: See my Explanation of Abstention for Comment 16-34.
KAHN: See my Explanation of Abstention on Comment 16-34.

16-807 Log #2760 NEC-P16 **Final Action: Reject**
(820.51, Table 820.50, 820.53, Table 820.53)

Submitter: Richard Fransen, Daikin America, Inc. / Rep. Cable Fire Research Association
Comment on Proposal No: 16-174
Recommendation: Change the panel action on this proposal from reject to accept in principle.
Substantiation: The panel accepted the listing of air duct cables when it accepted proposal 16-177 in principal.
Panel Meeting Action: Reject
Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:
"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."
This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.
Number Eligible to Vote: 15
Ballot Results: Affirmative: 13 Abstain: 2
Comment on Affirmative:
OHDE: See my Affirmative Comment on Comment 16-34.
Explanation of Abstention:
DORNA: See my Explanation of Abstention for Comment 16-34.
KAHN: See my Explanation of Abstention on Comment 16-34.

16-808 Log #2761 NEC-P16 **Final Action: Reject**
(820.51, Table 820.50, 820.53, Table 820.53)

Submitter: Richard Fransen, Daikin America, Inc. / Rep. Cable Fire Research Association
Comment on Proposal No: 16-176
Recommendation: Continue to accept this proposal in principle.
Substantiation: See the comment from CFRA on proposal 16-177.
Panel Meeting Action: Reject
Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:
"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."
This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.
Number Eligible to Vote: 15
Ballot Results: Affirmative: 13 Abstain: 2
Comment on Affirmative:
OHDE: See my Affirmative Comment on Comment 16-34.
Explanation of Abstention:
DORNA: See my Explanation of Abstention for Comment 16-34.
KAHN: See my Explanation of Abstention on Comment 16-34.

16-809 Log #2763 NEC-P16 **Final Action: Reject**
(820.51, Table 820.50, 820.53, Table 820.53)

Submitter: Richard Fransen, Daikin America, Inc. / Rep. Cable Fire Research Association
Comment on Proposal No: 16-178
Recommendation: Continue to accept this proposal in principle.
Substantiation: See the comment from CFRA on proposal 16-177.
Panel Meeting Action: Reject
Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:
"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."
This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.
Number Eligible to Vote: 15
Ballot Results: Affirmative: 13 Abstain: 2
Comment on Affirmative:
OHDE: See my Affirmative Comment on Comment 16-34.
Explanation of Abstention:
DORNA: See my Explanation of Abstention for Comment 16-34.
KAHN: See my Explanation of Abstention on Comment 16-34.

16-810 Log #2764 NEC-P16 **Final Action: Reject**
(820.51, Table 820.50, 820.53, Table 820.53)

Submitter: Richard Fransen, Daikin America, Inc. / Rep. Cable Fire Research Association
Comment on Proposal No: 16-179
Recommendation: Continue to accept this proposal in principle.
Substantiation: See the comment from CFRA on proposal 16-177.
Panel Meeting Action: Reject
Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:
"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."
This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.
Number Eligible to Vote: 15
Ballot Results: Affirmative: 13 Abstain: 2
Comment on Affirmative:
OHDE: See my Affirmative Comment on Comment 16-34.
Explanation of Abstention:
DORNA: See my Explanation of Abstention for Comment 16-34.
KAHN: See my Explanation of Abstention on Comment 16-34.

16-811 Log #2766 NEC-P16 **Final Action: Reject**
(820.51, Table 820.50, 820.53, Table 820.53)

Submitter: Richard Fransen, Daikin America, Inc. / Rep. Cable Fire Research Association
Comment on Proposal No: 16-181
Recommendation: Continue to accept this proposal in principle.
Substantiation: See the comment from CFRA on proposal 16-177.
Panel Meeting Action: Reject
Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:
"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."
This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.
Number Eligible to Vote: 15
Ballot Results: Affirmative: 13 Abstain: 2
Comment on Affirmative:
OHDE: See my Affirmative Comment on Comment 16-34.
Explanation of Abstention:
DORNA: See my Explanation of Abstention for Comment 16-34.
KAHN: See my Explanation of Abstention on Comment 16-34.

16-812 Log #2767 NEC-P16 **Final Action: Reject**
(820.51, Table 820.50, 820.53, Table 820.53)

Submitter: Richard Fransen, Daikin America, Inc. / Rep. Cable Fire Research Association
Comment on Proposal No: 16-182
Recommendation: Continue to accept this proposal in principle.
Substantiation: See the comment from CFRA on proposal 16-177.
Panel Meeting Action: Reject
Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:
"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."
This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.
Number Eligible to Vote: 15
Ballot Results: Affirmative: 13 Abstain: 2
Comment on Affirmative:
OHDE: See my Affirmative Comment on Comment 16-34.
Explanation of Abstention:
DORNA: See my Explanation of Abstention for Comment 16-34.
KAHN: See my Explanation of Abstention on Comment 16-34.

16-813 Log #2768 NEC-P16 **Final Action: Reject**
(820.51, Table 820.50, 820.53, Table 820.53)

Submitter: Richard Fransen, Daikin America, Inc. / Rep. Cable Fire Research Association
Comment on Proposal No: 16-183
Recommendation: Continue to accept this proposal in principle.
Substantiation: See the comment from CFRA on proposal 16-177.
Panel Meeting Action: Reject
Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:
"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."
This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.
Number Eligible to Vote: 15
Ballot Results: Affirmative: 13 Abstain: 2
Comment on Affirmative:
OHDE: See my Affirmative Comment on Comment 16-34.
Explanation of Abstention:
DORNA: See my Explanation of Abstention for Comment 16-34.
KAHN: See my Explanation of Abstention on Comment 16-34.

16-814 Log #2769 NEC-P16 **Final Action: Reject**
(820.51, Table 820.50, 820.53, Table 820.53)

Submitter: Richard Fransen, Daikin America, Inc. / Rep. Cable Fire Research Association
Comment on Proposal No: 16-184
Recommendation: Continue to accept this proposal in principle.
Substantiation: See the comment from CFRA on proposal 16-177.
Panel Meeting Action: Reject

Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:

"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."

This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.

Number Eligible to Vote: 15
Ballot Results: Affirmative: 13 Abstain: 2
Comment on Affirmative:
OHDE: See my Affirmative Comment on Comment 16-34.
Explanation of Abstention:
DORNA: See my Explanation of Abstention for Comment 16-34.
KAHN: See my Explanation of Abstention on Comment 16-34.

16-815 Log #2518aaaa NEC-P16 **Final Action: Accept**
(820.51, Table 820.50, 820.53, Table 820.53)

Note: See the Technical Correlating Committee Note on Comment 16-701.
Submitter: Vince Baclawski, National Electrical Manufacturers Association (NEMA)
Comment on Proposal No: 16-172
Recommendation: Reject this proposal.
Substantiation: See our companion comment on Proposal 1-69.
Panel Meeting Action: Accept
Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:

"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."

This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.

Number Eligible to Vote: 15
Ballot Results: Affirmative: 13 Abstain: 2
Comment on Affirmative:
OHDE: See my Affirmative Comment on Comment 16-34.
Explanation of Abstention:
DORNA: See my Explanation of Abstention for Comment 16-34.
KAHN: See my Explanation of Abstention on Comment 16-34.

16-816 Log #2518bbbb NEC-P16 **Final Action: Accept**
(820.51, Table 820.50, 820.53, Table 820.53)

Note: See the Technical Correlating Committee Note on Comment 16-701.
Submitter: Vince Baclawski, National Electrical Manufacturers Association (NEMA)
Comment on Proposal No: 16-176
Recommendation: Reject this proposal.
Substantiation: See our companion comment on Proposal 1-69.
Panel Meeting Action: Accept
Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:

"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."

This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.

Number Eligible to Vote: 15
Ballot Results: Affirmative: 13 Abstain: 2
Comment on Affirmative:
OHDE: See my Affirmative Comment on Comment 16-34.
Explanation of Abstention:
DORNA: See my Explanation of Abstention for Comment 16-34.
KAHN: See my Explanation of Abstention on Comment 16-34.

16-817 Log #2518rrrr NEC-P16 **Final Action: Accept**
(820.51, Table 820.50, 820.53, Table 820.53)

Note: See the Technical Correlating Committee Note on Comment 16-701.
Submitter: Vince Baclawski, National Electrical Manufacturers Association (NEMA)
Comment on Proposal No: 16-182
Recommendation: Reject this proposal.
Substantiation: See our companion comment on Proposal 1-69.
Panel Meeting Action: Accept
Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:

"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."

This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.

Number Eligible to Vote: 15
Ballot Results: Affirmative: 13 Abstain: 2
Comment on Affirmative:
OHDE: See my Affirmative Comment on Comment 16-34.
Explanation of Abstention:
DORNA: See my Explanation of Abstention for Comment 16-34.
KAHN: See my Explanation of Abstention on Comment 16-34.

16-818 Log #2518cccc NEC-P16 **Final Action: Accept**
(820.51, Table 820.50, 820.53, Table 820.53, Figure 820.53)

Note: See the Technical Correlating Committee Note on Comment 16-701.
Submitter: Vince Baclawski, National Electrical Manufacturers Association (NEMA)
Comment on Proposal No: 16-178
Recommendation: Reject this proposal.
Substantiation: See our companion comment on Proposal 1-69.
Panel Meeting Action: Accept
Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:

"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."

This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.

Number Eligible to Vote: 15
Ballot Results: Affirmative: 13 Abstain: 2
Comment on Affirmative:
OHDE: See my Affirmative Comment on Comment 16-34.
Explanation of Abstention:
DORNA: See my Explanation of Abstention for Comment 16-34.
KAHN: See my Explanation of Abstention on Comment 16-34.

16-819 Log #2518dddd NEC-P16 **Final Action: Accept**
(820.51, Table 820.50, 820.53, Table 820.53, Figure 820.53)

Note: See the Technical Correlating Committee Note on Comment 16-701.
Submitter: Vince Baclawski, National Electrical Manufacturers Association (NEMA)
Comment on Proposal No: 16-181
Recommendation: Reject this proposal.
Substantiation: See our companion comment on Proposal 1-69.
Panel Meeting Action: Accept
Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:

"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project

on the applicable technical subjects pending completion of the NFPA 90A revision cycle."

This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.

Number Eligible to Vote: 15
Ballot Results: Affirmative: 13 Abstain: 2
Comment on Affirmative:
OHDE: See my Affirmative Comment on Comment 16-34.
Explanation of Abstention:
DORNA: See my Explanation of Abstention for Comment 16-34.
KAHN: See my Explanation of Abstention on Comment 16-34.

16-820 Log #2518eeee NEC-P16 **Final Action: Accept**
(820.51, Table 820.50, 820.53, Table 820.53, Figure 820.53)

Note: See the Technical Correlating Committee Note on Comment 16-701.
Submitter: Vince Baclawski, National Electrical Manufacturers Association (NEMA)
Comment on Proposal No: 16-183
Recommendation: Reject this proposal.
Substantiation: See our companion comment on Proposal 1-69.
Panel Meeting Action: Accept
Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:

"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."

This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.

Number Eligible to Vote: 15
Ballot Results: Affirmative: 13 Abstain: 2
Comment on Affirmative:
OHDE: See my Affirmative Comment on Comment 16-34.
Explanation of Abstention:
DORNA: See my Explanation of Abstention for Comment 16-34.
KAHN: See my Explanation of Abstention on Comment 16-34.

16-821 Log #2518oooo NEC-P16 **Final Action: Accept**
(820.51, Table 820.50, 820.53, Table 820.53, Figure 820.53)

Note: See the Technical Correlating Committee Note on Comment 16-701.
Submitter: Vince Baclawski, National Electrical Manufacturers Association (NEMA)
Comment on Proposal No: 16-173
Recommendation: Reject this proposal.
Substantiation: See our companion comment on Proposal 1-69.
Panel Meeting Action: Accept
Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:

"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."

This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.

Number Eligible to Vote: 15
Ballot Results: Affirmative: 13 Abstain: 2
Comment on Affirmative:
OHDE: See my Affirmative Comment on Comment 16-34.
Explanation of Abstention:
DORNA: See my Explanation of Abstention for Comment 16-34.
KAHN: See my Explanation of Abstention on Comment 16-34.

16-822 Log #2518pppp NEC-P16 **Final Action: Accept**
(820.51, Table 820.50, 820.53, Table 820.53, Figure 820.53)

Note: See the Technical Correlating Committee Note on Comment 16-701.
Submitter: Vince Baclawski, National Electrical Manufacturers Association (NEMA)
Comment on Proposal No: 16-177
Recommendation: Reject this proposal.
Substantiation: See our companion comment on Proposal 1-69.
Panel Meeting Action: Accept
Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:

"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."

This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.

Number Eligible to Vote: 15
Ballot Results: Affirmative: 13 Abstain: 2
Comment on Affirmative:
OHDE: See my Affirmative Comment on Comment 16-34.
Explanation of Abstention:
DORNA: See my Explanation of Abstention for Comment 16-34.
KAHN: See my Explanation of Abstention on Comment 16-34.

16-823 Log #2518qqqq NEC-P16 **Final Action: Accept**
(820.51, Table 820.50, 820.53, Table 820.53, Figure 820.53)

Note: See the Technical Correlating Committee Note on Comment 16-701.
Submitter: Vince Baclawski, National Electrical Manufacturers Association (NEMA)
Comment on Proposal No: 16-179
Recommendation: Reject this proposal.
Substantiation: See our companion comment on Proposal 1-69.
Panel Meeting Action: Accept
Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:

"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."

This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.

Number Eligible to Vote: 15
Ballot Results: Affirmative: 13 Abstain: 2
Comment on Affirmative:
OHDE: See my Affirmative Comment on Comment 16-34.
Explanation of Abstention:
DORNA: See my Explanation of Abstention for Comment 16-34.
KAHN: See my Explanation of Abstention on Comment 16-34.

16-824 Log #2518ssss NEC-P16 **Final Action: Accept**
(820.51, Table 820.50, 820.53, Table 820.53, Figure 820.53)

Note: See the Technical Correlating Committee Note on Comment 16-701.
Submitter: Vince Baclawski, National Electrical Manufacturers Association (NEMA)
Comment on Proposal No: 16-184
Recommendation: Reject this proposal.
Substantiation: See our companion comment on Proposal 1-69.
Panel Meeting Action: Accept
Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:

"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."

This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.

Number Eligible to Vote: 15
Ballot Results: Affirmative: 13 Abstain: 2
Comment on Affirmative:
OHDE: See my Affirmative Comment on Comment 16-34.
Explanation of Abstention:
DORNA: See my Explanation of Abstention for Comment 16-34.
KAHN: See my Explanation of Abstention on Comment 16-34.

16-825 Log #375 NEC-P16 **Final Action: Reject**
(820.51, FPN (New))

Submitter: Technical Committee on Air Conditioning
Comment on Proposal No: 16-175
Recommendation: Accept this proposal in principle by adding a fine print as shown below.
FPN: See section 4.3.10 of NFPA 90A-2002, Standard for the Installation of Air-Conditioning and Ventilating Systems for listing requirements for plenum raceway.
Substantiation: See the comment on proposal 16-49 from the Technical Committee on Air Conditioning that proposed this fine print note for optical fiber and communications raceways.
Panel Meeting Action: Reject
Panel Statement: The Code will be easier to use if the listing requirements are included in the NEC, rather than in another document.
Number Eligible to Vote: 15
Ballot Results: Affirmative: 15

16-826 Log #1490 NEC-P16 **Final Action: Accept**
(820.51(A))

Note: See the Technical Correlating Committee Note on Comment 16-106.
Submitter: Marcelo M. Hirschler, GBH International / Rep. Fire Retardant Chemicals
Comment on Proposal No: 16-46
Recommendation: Continue rejecting this proposal.
Substantiation: • This comment recommends rejection of a subdivision of "other spaces used for environmental air" and continued rejection of granting priority to NFPA 90A on choices of wiring methods.
• The input from CMP 3 and from the NEC Technical Coordinating Committee makes it clear that the terminology used in 300.22 has served the NEC well and needs no change. It has also become clear now that the expertise needed for choosing the type of wiring systems permitted in any space should be the prerogative of the NEC, which (through its various panels and its Technical Correlating Committee) has greater expertise and a broader view than the Technical Committee on Air Conditioning (responsible for NFPA 90A). Therefore, the NEC panels should continue making their own choices regarding wiring methods.
• It has already been shown in detail by the fire hazard and fire risk analysis presented together with my original proposals (see for example the section on pages 2080-2091 of the NEC-ROP of the substantiation for my proposal 3-130) that there is no need to change the requirements, or limit the application, for wiring methods in plenums, because the fire safety record is excellent.
• I understand that this comment represents a change in some of the concepts the submitter believed when the proposal was submitted, but "even old dogs can learn".
Panel Meeting Action: Accept
Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:
"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."
This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.
Number Eligible to Vote: 15
Ballot Results: Affirmative: 13 Abstain: 2
Comment on Affirmative:
OHDE: See my Affirmative Comment on Comment 16-34.
Explanation of Abstention:
DORNA: See my Explanation of Abstention for Comment 16-34.
KAHN: See my Explanation of Abstention on Comment 16-34.

16-827 Log #228 NEC-P16 **Final Action: Accept in Principle**
(820.51(A), FPN)

Note: See the Technical Correlating Committee Note on Comment 16-701.
Submitter: Technical Committee on Air Conditioning
Comment on Proposal No: 16-185
Recommendation: Continue to accept this proposal in principle.
Substantiation: See the comment from the Technical Committee on Air Conditioning on proposal 16-47.
Panel Meeting Action: Accept in Principle
Panel Statement: The FPN accepted in the panel action on Comment 16-830 is an editorial improvement over the existing fine print notes.
Number Eligible to Vote: 15
Ballot Results: Affirmative: 14 Negative: 1
Explanation of Negative:
JONES: The substantiation provided in the associated Proposal 16-185 used NFPA 90A as part of the reason for the suggested change. The Standards Council made a decision that is identified as Number 03-10-25 plus subsequent letter by the Standards Council Chairman, Phillip DiNenno to Mr. Loren Caudill, dated December 3, 2003, which stated, in pertinent part as follows:
"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."

16-828 Log #2813 NEC-P16 **Final Action: Accept in Principle**
(820.51(A), FPN)

Note: See the Technical Correlating Committee Note on Comment 16-701.
Submitter: Richard P. Owen, City of St. Paul, Minnesota
Comment on Proposal No: 16-185
Recommendation: Continue to accept in principle.
Substantiation: The Panel 3/Panel 16 Task Group, appointed by the NEC TCC, developed this comment.
The task group agrees with Panel 16's action and statement.
The following members of Panels 3 and 16 participated in this Task Group assignment: From Panel 3, Mr. Sanford E. Egesdal representing the Automatic Fire Alarm Association, Inc., Mr. Ronald E. Maassen representing the National Electrical Contractors Association, and Mr. Mark C. Ode representing Underwriters Laboratories Inc. From Panel 16, Mr. Robert W. Jensen representing the Building Industry Consulting Services International, Mr. Harold C. Ohde representing the International Brotherhood of Electrical Workers, and Mr. Joseph W. Rao representing the Independent Electrical Contractors, Inc. Mr. Richard P. Owen, the Chairman of CMP 3, representing the International Association of Electrical Inspectors, was the chairman of the Task Group.
Panel Meeting Action: Accept in Principle
Panel Statement: The fine print note accepted in the panel action on Comment 16-830 is an editorial improvement over the existing fine print notes.
Number Eligible to Vote: 15
Ballot Results: Affirmative: 14 Negative: 1
Explanation of Negative:
JONES: The substantiation provided in the associated Proposal 16-185 used NFPA 90A as part of the reason for the suggested change. The Standards Council made a decision that is identified as Number 03-10-25 plus subsequent letter by the Standards Council Chairman, Phillip DiNenno to Mr. Loren Caudill, dated December 3, 2003, which stated, in pertinent part as follows:
"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."

16-829 Log #3170 NEC-P16 **Final Action: Reject**
(820.51(A), FPN)

Submitter: Michael I. Callanan, IBEW
Comment on Proposal No: 16-185
Recommendation: This proposal should be rejected and the proposed 2005 text should be deleted. Retain the current 2002 FPN for related code section.
Substantiation: An effort to better correlate the requirements in the NFPA 70 standard with the NFPA 90A will require teamwork and representation from both committees. There is no such definition - adequate fire resistant and low smoke producing characteristics located in the 2002 NFPA 90A, Standard for Installation of Air-Conditioning and Ventilating Systems. It is a requirement not a definition. The new proposed FPN language - For a definition of adequate fire-resistant and low smoke producing characteristics is not in the form of a true FPN which is used as a suggestion but its language spells more of a requirement. This FPN is in violation of the nature of a FPN and also the NEC Style Manual 3.1.3 which states FPNs contain explanatory information. They shall not contain requirements and shall not be written in mandatory language. This proposal does not add to the clarity and consistency of the National Electrical Code.
If a change to the National Electrical Code is needed in the way electrical installations are installed and completed, the technical nuts and bolts issues will have to be worked out and a plan has to be developed that will take into account what effect the change or changes will have on both the NFPA 90A Standard as well as the NFPA 70, National Electrical Code. This will allow both standards to become stronger, more stronger and more effective to everyone involved. This will also eliminate conflicting standards between the two and harmonize all that are involved.
This comment represents the official position of the International Brotherhood of Electrical Workers Codes and Standards Committee.
Panel Meeting Action: Reject
Panel Statement: CMP 16 rejects the comment and clarified the FPNs. Refer to action on Comment 16-830.

Number Eligible to Vote: 15
Ballot Results: Affirmative: 14 Negative: 1
Explanation of Negative:
JONES: The substantiation provided in the associated Proposal 16-185 used NFPA 90A as part of the reason for the suggested change. The Standards Council made a decision that is identified as Number 03-10-25 plus subsequent letter by the Standards Council Chairman, Phillip DiNenno to Mr. Loren Caudill, dated December 3, 2003, which stated, in pertinent part as follows:
"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."

16-830 Log #3729 NEC-P16 **Final Action: Accept**
(820.51(A), FPN)

Note: See the Technical Correlating Committee Note on Comment 16-701.
Submitter: Marcelo M. Hirschler, GBH International / Rep. Fire Retardant Chemicals Association
Comment on Proposal No: 16-185
Recommendation: 820.51 Additional Listing Requirements.
Cables shall be listed in accordance with 820.51(A) through (D).
(A) Type CATVP. Type CATVP community antenna television plenum cable shall be listed as being suitable for use in ducts, plenums, and other spaces used for environmental air and shall also be listed as having adequate fire resistant and low smoke producing characteristics.
FPN: One method of defining a cable that is low smoke producing cable and fire-resistant cable is that the cable exhibits a maximum peak optical density of 0.5 or less, an average optical density of 0.15 or less, and a maximum flame spread distance of 1.52 m (5 ft) or less when tested in accordance with NFPA 262, Standard Method of Test for Flame Travel and Smoke of Wires and Cables for Use in Air Handling Spaces. ~~by establishing an acceptable value of the smoke produced when tested in accordance with NFPA 262-1999, Standard Method of Test for Flame Travel and Smoke of Wires and Cables for Use in Air Handling Spaces, to a maximum peak optical density of 0.5 and a maximum average optical density of 0.15. Similarly, one method of defining fire resistant cables is by establishing a maximum allowable flame travel distance of 1.52 m (5 ft) when tested in accordance with the same test.~~
No change for 820.51 (B) through 820.51 (D).
Substantiation: This comment recommends a slight change in wording for the existing Fine Print Note, by recognizing that listing of plenum cable by NFPA 262 represents listing to both low smoke and low flame spread, and that cables cannot be listed separately to either property. This is basically an editorial change, as a clarification, to the existing Fine Print Note.
This comment also recommends a rejection of the initial concept in the proposal to reference NFPA 90A, which would mean that requirements for these cables could change without the knowledge and assent of NEC CMP members.
It has become clear now that the expertise needed for choosing the type of wiring systems permitted in any space should be the prerogative of the NEC, which (through its various panels and its Technical Correlating Committee) has greater expertise and a broader view than the Technical Committee on Air Conditioning (responsible for NFPA 90A). Therefore, the NEC panels should continue making their own choices regarding wiring methods. The issue of correlation (or even reference) to either NFPA 90A or the categories of plenums used in NFPA 90A should continue to be rejected by CMP 3. As stated by Mr. Harold Ohde in his negative on CMP 16 action on proposal 16-9: "Other codes should not be deciding on the typed of wiring methods to be used in these spaces. The electrical experts are capable of doing this and it is covered quite well in 300.22. The more we let those outside of the NEC make these decisions the more we weaken adoption of the NEC. In addition, we could make the change and there is nothing that requires a jurisdiction to even adopt 90A."
This comment is one of a series of comments on Articles 300, 725, 760, 770, 800, 820 and 830, regarding "plenum cables". The philosophy behind all the comments is that the NEC is OK as published in 2002, but that 2 minor changes might represent improvements: (i) the clarification of the 6 inch extension of a wiring method into a more restricted environment and (ii) the clarification in the Fine Print Notes that a cable listed to NFPA 262 is listed both based on its "low-smoke" characteristics and its "low-flame-spread" characteristics, and that the two are not listed separately.
I understand that this comment represents a change in some of the concepts the submitter believed when the proposal was submitted, but "even old dogs can learn".
See attached comments from the chairman of the Technical Correlating Committee.
Panel Meeting Action: Accept
Number Eligible to Vote: 15
Ballot Results: Affirmative: 14 Negative: 1
Explanation of Negative:
JONES: The substantiation provided in the associated Proposal 16-185 used NFPA 90A as part of the reason for the suggested change. The Standards Council made a decision that is identified as Number 03-10-25 plus subsequent letter by the Standards Council Chairman, Phillip DiNenno to Mr. Loren Caudill, dated December 3, 2003, which stated, in pertinent part as follows:
"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."

16-831 Log #277 NEC-P16 **Final Action: Accept**
(820.52)

Submitter: Technical Committee on Air Conditioning
Comment on Proposal No: 16-188
Recommendation: Continue to reject this proposal.
Substantiation: The Technical Committee on Air Conditioning agrees with the panel reject statement.
This comment is one in a series of comments including 16-12, 16-40, 16-60, 16-83, 16-115, 16-132, 16-138, 16-156, 16-180, 16-188, 16-195, 16-207, 16-209, 16-211, 16-228, 16-229, and 16-234.
Panel Meeting Action: Accept
Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:
"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."
This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.
Number Eligible to Vote: 15
Ballot Results: Affirmative: 13 Abstain: 2
Comment on Affirmative:
OHDE: See my Affirmative Comment on Comment 16-34.
Explanation of Abstention:
DORNA: See my Explanation of Abstention for Comment 16-34.
KAHN: See my Explanation of Abstention on Comment 16-34.

16-832 Log #3171 NEC-P16 **Final Action: Accept**
(820.52)

Submitter: Michael I. Callanan, IBEW
Comment on Proposal No: 16-188
Recommendation: Continue to reject.
Substantiation: I agree with the panel action to reject proposal 16-195. No technical substantiation has been provided that a change to the 2002 NEC language is needed or required. This comment represents the official position of the International Brotherhood of Electrical Workers Code and Standards Committee.
Panel Meeting Action: Accept
Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:
"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."
This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.
Number Eligible to Vote: 15
Ballot Results: Affirmative: 13 Abstain: 2
Comment on Affirmative:
OHDE: See my Affirmative Comment on Comment 16-34.
Explanation of Abstention:
DORNA: See my Explanation of Abstention for Comment 16-34.
KAHN: See my Explanation of Abstention on Comment 16-34.

16-833 Log #3720 NEC-P16 **Final Action: Accept**
(820.52)

Submitter: Marcelo M. Hirschler, GBH International / Rep. Fire Retardant Chemicals Association
Comment on Proposal No: 16-188
Recommendation: Continue rejecting this proposal and make no changes in the terminology of plenum spaces or of "other spaces used for environmental air".
Substantiation: The terminology in NEC 2002 is correct and needs no change. See also the substantiation for my comments on proposal 16-59.

Panel Meeting Action: Accept
Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:
"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."
This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.
Number Eligible to Vote: 15
Ballot Results: Affirmative: 13 Abstain: 2
Comment on Affirmative:
OHDE: See my Affirmative Comment on Comment 16-34.
Explanation of Abstention:
DORNA: See my Explanation of Abstention for Comment 16-34.
KAHN: See my Explanation of Abstention on Comment 16-34.

16-834 Log #2712 NEC-P16 **Final Action: Reject**
(820.52, Figure 820-53 and Table 820-53)

Submitter: Richard P. Owen, City of St. Paul, Minnesota
Comment on Proposal No: 16-196
Recommendation: Continue to accept in principle.
Substantiation: The Panel 3/Panel 16 Task Group, appointed by the NEC TCC, developed this comment.
The task group agrees with Panel 16's action and statement.
The NEC TCC Task Group on Correlation Issues Between Panels 3 and 16 met three times via teleconference calls. The assignment by the TCC Chairman was to attempt to develop a resolution and accompanying comments for the different actions taken on proposals dealing with similar issues by CMP 3 and CMP 16 for their respective Articles in Chapters 7 and 8 of the NEC.
The Task Group studied the issues and determined that there were five major differences in the actions on proposals concerning Articles 725, 760, 770, 800, 820, and 830. The voting on these issues was not unanimous but did pass as at least a simple majority of the Task Group.
One of the major differences involved installing air duct cables in a fabricated air duct without enclosing the cable in a metal raceway.
The Task Group members who attended the teleconference call voted to accept text that permits "air duct cable" to be installed in fabricated ducts without enclosing in an additional metal raceway or metal cable. The text to be accepted by Panel 3 is recommended to be similar to that found in Proposals 3-194 for Article 725 and 3-288 for Article 760. The "air duct cable" will replace the plenum cable that was previously acceptable in fabricated duct without enclosing in a metal raceway or metal cable assembly.
The following members of Panels 3 and 16 participated in this Task Group assignment: From Panel 3, Mr. Sanford E. Egesdal representing the Automatic Fire Alarm Association, Inc., Mr. Ronald E. Maassen representing the National Electrical Contractors Association, and Mr. Mark C. Ode representing Underwriters Laboratories Inc. From Panel 16, Mr. Robert W. Jensen representing the Building Industry Consulting Services International, Mr. Harold C. Ohde representing the International Brotherhood of Electrical Workers, and Mr. Joseph W. Rao representing the Independent Electrical Contractors, Inc. Mr. Richard P. Owen, the Chairman of CMP 3, representing the International Association of Electrical Inspectors, was the chairman of the Task Group.
Panel Meeting Action: Reject
Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:
"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."
This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.
Number Eligible to Vote: 15
Ballot Results: Affirmative: 13 Abstain: 2
Comment on Affirmative:
OHDE: See my Affirmative Comment on Comment 16-34.
Explanation of Abstention:
DORNA: See my Explanation of Abstention for Comment 16-34.
KAHN: See my Explanation of Abstention on Comment 16-34.

16-835 Log #2518ffff NEC-P16 **Final Action: Accept**
(820.52, Figure 820.53, Table 820.53)

Note: See the Technical Correlating Committee Note on Comment 16-701.
Submitter: Vince Baclawski, National Electrical Manufacturers Association (NEMA)
Comment on Proposal No: 16-196
Recommendation: Reject this proposal.
Substantiation: See our companion comment on Proposal 1-69.
Panel Meeting Action: Accept
Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:
"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."
This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.
Number Eligible to Vote: 15
Ballot Results: Affirmative: 13 Abstain: 2
Comment on Affirmative:
OHDE: See my Affirmative Comment on Comment 16-34.
Explanation of Abstention:
DORNA: See my Explanation of Abstention for Comment 16-34.
KAHN: See my Explanation of Abstention on Comment 16-34.

16-836 Log #40 NEC-P16 **Final Action: Reject**
(820.53)

Submitter: Stanley Kaufman, CableSafe, Inc.
Comment on Proposal No: 16-194
Recommendation: Continue to accept Proposal 16-194 in principle but add CATVD cable to the list of cables permitted in the various CATV raceways.
Substantiation: Panel action on Proposal 16-177 established Type CATVD air duct cable and permitted it to substitute for Type CATVP. In order to be editorially consistent with Articles 770 and 800, Type CATVD needs to be explicitly mentioned as one of the cables permitted in these raceways. See my comment on Proposal 16-177 which shows the suggested wording revision.
Panel Meeting Action: Reject
Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:
"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."
This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.
Number Eligible to Vote: 15
Ballot Results: Affirmative: 15
Comment on Affirmative:
OHDE: See my Affirmative Comment on Comment 16-34.

16-837 Log #827 NEC-P16 **Final Action: Accept**
(Table 820.53)

Submitter: Technical Correlating Committee on National Electrical Code®
Comment on Proposal No: 16-197
Recommendation: The Technical Correlating Committee directs that the Panel clarify the Panel Action on this Proposal. This action will be considered by the Panel as a Public Comment.
Substantiation: This is a direction from the National Electrical Code Technical Correlating Committee in accordance with 3-4.2 and 3-4.3 of the Regulations Governing Committee Projects.
Panel Meeting Action: Accept
Modify accepted Proposal 16-211a with the following tables
(tables shown on following page)
Panel Statement: CMP 16 accepts the direction of the TCC to review Proposal 16-197. The panel clarified its action when it accepted Proposal 16-211a. Upon further review, Cable Substitutions Tables 820.53 and 830.58 have been corrected in accordance with Proposals 16-197, 16-198, and 16-211a. In addition, Type CMG was restored because of panel action on Comments 16-90 and 16-10.
Number Eligible to Vote: 15
Ballot Results: Affirmative: 15

16-838 Log #828 NEC-P16 **Final Action: Accept**
(Table 820.53)

Submitter: Technical Correlating Committee on National Electrical Code®
Comment on Proposal No: 16-198
Recommendation: The Technical Correlating Committee directs that the Panel clarify the Panel Action on this Proposal. This action will be considered by the Panel as a Public Comment.
Substantiation: This is a direction from the National Electrical Code Technical Correlating Committee in accordance with 3-4.2 and 3-4.3 of the Regulations Governing Committee Projects.
Panel Meeting Action: Accept
Modify accepted Proposal 16-211a with the following tables.
(tables shown on following page)
Panel Statement: CMP 16 accepts the direction of the TCC to review Proposal 16-198.
The panel clarified its action when it accepted Proposal 16-211a. Upon further review, Cable Substitutions Tables 820.53 and 830.58 have been corrected in accordance with Proposals 16-197, 16-198, and 16-211a. In addition, Type CMG was restored because of panel action on Comments 16-90 and 16-10.
Number Eligible to Vote: 15
Ballot Results: Affirmative: 15

16-839 Log #256 NEC-P16 **Final Action: Accept**
(820.53)

Submitter: Technical Committee on Air Conditioning
Comment on Proposal No: 16-195
Recommendation: Continue to reject this proposal.
Substantiation: The Technical Committee on Air Conditioning agrees with the panel reject statement.
This comment is one in a series of comments including 16-12, 16-40, 16-60, 16-83, 16-115, 16-132, 16-138, 16-156, 16-180, 16-188, 16-195, 16-207, 16-209, 16-211, 16-228, 16-229 and 16-234.
Panel Meeting Action: Accept
Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:
"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."
This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.
Number Eligible to Vote: 15
Ballot Results: Affirmative: 13 Abstain: 2
Comment on Affirmative:
OHDE: See my Affirmative Comment on Comment 16-34.
Explanation of Abstention:
DORNA: See my Explanation of Abstention for Comment 16-34.
KAHN: See my Explanation of Abstention on Comment 16-34.

16-840 Log #376 NEC-P16 **Final Action: Reject**
(820.53)

Submitter: Technical Committee on Air Conditioning
Comment on Proposal No: 16-194
Recommendation: Continue to accept this proposal in principle.
Substantiation: The panel action on this proposal providing for the application of CATV raceways in ceiling cavity and raised floor plenums correlates with NFPA 90A-2002.
Panel Meeting Action: Reject
Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:
"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."
This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.
Number Eligible to Vote: 15
Ballot Results: Affirmative: 14 Negative: 1
Explanation of Negative:
DORNA: The panel should have taken action on comment 16-840 similar to the action it took on comment 16-79, where the panel used the term "other spaces used for environmental air" in place of "ceiling cavity plenums and raised floor plenums." Had it taken that action, plenum cables would have been restricted to "other spaces used for environmental air" and the conflict between the NEC and NFPA 90A and the conflict within NFPA 5000 would have been essentially removed because the term "other spaces used for environmental air" is roughly equivalent to "ceiling cavity plenums" plus "raised floor plenums".
Comment on Affirmative:
OHDE: See my Affirmative Comment on Comment 16-34.

16-841 Log #1472 NEC-P16 **Final Action: Accept**
(820.53)

Submitter: Marcelo M. Hirschler, GBH International / Rep. Fire Retardant Chemicals
Comment on Proposal No: 16-59
Recommendation: Continue rejecting this proposal.
Substantiation: • This comment recommends continued rejection of a subdivision of "plenums" or "other spaces used for environmental air" and continued rejection of granting priority to NFPA 90A on choices of wiring methods.
• The input from CMP 3 and from the NEC Technical Coordinating Committee makes it clear that the terminology used in 300.22 has served the NEC well and needs no change. It has also become clear now that the expertise needed for choosing the type of wiring systems permitted in any space should be the prerogative of the NEC, which (through its various panels and its Technical Correlating Committee) has greater expertise and a broader view than the Technical Committee on Air Conditioning (responsible for NFPA 90A). Therefore, the NEC panels should continue making their own choices regarding wiring methods.
• It has already been shown in detail by the fire hazard and fire risk analysis presented together with my original proposals (see for example the section on pages 2080-2091 of the NECROP of the substantiation for my proposal 3-130) that there is no need to change the requirements, or limit the application, for wiring methods in plenums, because the fire safety record is excellent.
• I understand that this comment represents a change in some of the concepts the submitter believed when the proposal was submitted, but "even old dogs can learn".
Panel Meeting Action: Accept
Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:
"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."
This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.
Number Eligible to Vote: 15
Ballot Results: Affirmative: 13 Abstain: 2
Comment on Affirmative:
OHDE: See my Affirmative Comment on Comment 16-34.
Explanation of Abstention:
DORNA: See my Explanation of Abstention for Comment 16-34.
KAHN: See my Explanation of Abstention on Comment 16-34.

Comments 16-387 (Log #827) and 16-838 (Log #828)

Table 820.53 Coaxial Cable Uses and Permitted Substitutions

Cable Type	Permitted Cable Substitutions
CATVP	CMP, BLP
CATVR	CATVP, CMP, CMR, BMR, BLP, BLR
CATV	CATVP, CMP, CATVR, CMR, CMG, CM, BMR, BM, BLP, BLR, BL
CATVX	CATVP, CMP, CATVR, CMR, CATV, CMG, CM, BMR, BM, BLP, BLR, BL, BLX

Table 830.58 Cable Substitutions

Cable Type	Permitted Cable Substitutions
BM	BMR
BLP	CMP, CL3P
BLR	CMP, CL3P, CMR, CL3R, BLP, BMR
BL	CMP, CMR, CM, CMG, CL3P, CL3R, CL3, BMR, BM, BLP, BLR
BLX	CMP, CMR, CM, CMG, CMX, CL3P, CL3R, CL3, CL3X, BMR, BM, BLP, BLR, BL

16-842 Log #1476 NEC-P16 **Final Action: Reject**
(820.53)

Submitter: Marcelo M. Hirschler, GBH International / Rep. Fire Retardant Chemicals
Comment on Proposal No: 16-194
Recommendation: Continue accepting this proposal in principle but change the language accepted by CMP 16, in section (A) as follows. Also reinstate "coaxial raceways" instead of CATV raceways in sections (B)(1) and (D)(1)

820.53 Applications of Listed CATV Cables.

CATV cables shall comply with the requirements of 820.53(A) through (D) or where cable substitutions are made as shown in Table 820.53.

(A) Plenum. Cables installed in ducts, plenums, and other spaces used for environmental air shall be Type CATVP. ~~Types CATVP, CATVR, CATV and CATVX cables~~ Listed wires and cables installed in compliance with 300.22 shall be permitted. Listed plenum coaxial raceways shall be permitted to be installed in other spaces used for environmental air as described in 300.22 (C). ~~Listed plenum CATV raceways shall be permitted to be installed in ceiling cavity plenums and raised floor plenums.~~ Only Type CATVP cable shall be permitted to be installed in these raceways.

Substantiation: This comment recommends a rejection of the concept of subdividing plenums and "other spaces used for environmental air". It has already been shown in detail by the fire hazard and fire risk analysis presented together with my original proposals (see for example the section on pages 20802091 of the NEC-ROP of the substantiation for my proposal 3-130) that there is no need to change the requirements, or limit the application, for wiring methods in plenums, because the fire safety record is excellent.
This comment recommends making article 820 consistent, since coaxial raceways is used in section 820.51 (proposal 16-175) and is the language proposed by the proponent of both 16-175 and 16-194. The language proposed for the section on plenum coaxial raceways is consistent with that in article 725 for plenum signaling raceways.

This comment also recommends a rejection of the concept of referencing NFPA 90A in the FPN, which would mean that requirements for these raceways could change without the knowledge and assent of NEC CMP members.

It has become clear now that the expertise needed for choosing the type of wiring systems permitted in any space should be the prerogative of the NEC, which (through its various panels and its Technical Correlating Committee) has greater expertise and a broader view than the Technical Committee on Air Conditioning (responsible for NFPA 90A). Therefore, the NEC panels should continue making their own choices regarding wiring methods. The issue of correlation (or even reference) to either NFPA 90A or the categories of plenums used in NFPA 90A should continue to be rejected by CMP 3. As stated by Mr. Harold Ohde in his negative on CMP 16 action on proposal 16-9: "Other codes should not be deciding on the typed of wiring methods to be used in these spaces. The electrical experts are capable of doing this and it is covered quite well in 300.22. The more we let those outside of the NEC make these decisions the more we weaken adoption of the NEC. In addition, we could make the change and there is nothing that requires a jurisdiction to even adopt 90A."

See attached comments from the chairman of the Technical Correlating Committee. (No attachment Received at NFPA.)

Panel Meeting Action: Reject
Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:

"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."

This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.
Number Eligible to Vote: 15
Ballot Results: Affirmative: 13 Abstain: 2
Comment on Affirmative:
OHDE: See my Affirmative Comment on Comment 16-34.
Explanation of Abstention:
DORNA: See my Explanation of Abstention for Comment 16-34.
KAHN: See my Explanation of Abstention on Comment 16-34.

16-843 Log #1477 NEC-P16 **Final Action: Accept**
(820.53)

Note: See the Technical Correlating Committee Note on Comment 16-701.
Submitter: Marcelo M. Hirschler, GBH International / Rep. Fire Retardant Chemicals
Comment on Proposal No: 16-194
Recommendation: Reject this proposal.
Substantiation: This comment recommends a rejection of the concept of subdividing plenums and "other spaces used for environmental air". It has already been shown in detail by the fire hazard and fire risk analysis presented together with my original proposals (see for example the section on pages 20802091 of the NEC-ROP of the substantiation for my proposal 3-130) that there is no need to change the requirements, or limit the application, for wiring methods in plenums, because the fire safety record is excellent.
This comment also recommends a rejection of the concept of referencing NFPA 90A in the FPN, which would mean that requirements for these raceways could change without the knowledge and assent of NEC CMP members.
It has become clear now that the expertise needed for choosing the type of wiring systems permitted in any space should be the prerogative of the NEC, which (through its various panels and its Technical Correlating Committee) has greater expertise and a broader view than the Technical Committee on Air Conditioning (responsible for NFPA 90A). Therefore, the NEC panels should continue making their own choices regarding wiring methods. The issue of correlation (or even reference) to either NFPA 90A or the categories of plenums used in NFPA 90A should continue to be rejected by CMP 3. As stated by Mr. Harold Ohde in his negative on CMP 16 action on proposal 16-9: "Other codes should not be deciding on the typed of wiring methods to be used in these spaces. The electrical experts are capable of doing this and it is covered quite well in 300.22. The more we let those outside of the NEC make these decisions the more we weaken adoption of the NEC. In addition, we could make the change and there is nothing that requires a jurisdiction to even adopt 90A."
See attached comments from the chairman of the Technical Correlating Committee. (No attachment Received at NFPA.)
Panel Meeting Action: Accept
Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:
"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."
This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.
Number Eligible to Vote: 15
Ballot Results: Affirmative: 13 Abstain: 2
Comment on Affirmative:
OHDE: See my Affirmative Comment on Comment 16-34.
Explanation of Abstention:
DORNA: See my Explanation of Abstention for Comment 16-34.
KAHN: See my Explanation of Abstention on Comment 16-34.

16-844 Log #1775 NEC-P16 **Final Action: Accept**
(820.53)

Submitter: Richard P. Owen, City of St. Paul, Minnesota
Comment on Proposal No: 16-195
Recommendation: Continue to reject.
Substantiation: The Panel 3/Panel 16 Task Group, appointed by the NEC TCC, developed this comment.
The task group agrees with Panel 16's action and statement.
By accepting the majority of the suggested changes in a submitted comment for Proposal 3-94, "Other Spaces for Environmental Air" has been further subdivided into two separate spaces, ceiling cavity and raised floor plenums but the Panel still has maintained the electrical industry terminology associated with these spaces. Providing this further subdivision will enhance the usability of the NEC by making it easier to determine what other spaces are being referenced in this section. It will also improve correlation between the NEC and NFPA 90A.
The following members of Panels 3 and 16 participated in this Task Group assignment: From Panel 3, Mr. Sanford E. Egesdal representing the Automatic Fire Alarm Association, Inc., Mr. Ronald E. Maassen representing the National Electrical Contractors Association, and Mr. Mark C. Ode representing Underwriters Laboratories Inc. From Panel 16, Mr. Robert W. Jensen representing the Building Industry Consulting Services International, Mr. Harold C. Ohde representing the International Brotherhood of Electrical Workers, and Mr. Joseph W. Rao representing the Independent Electrical Contractors, Inc. Mr. Richard P. Owen, the Chairman of CMP 3, representing the International Association of Electrical Inspectors, was the chairman of the Task Group.
Panel Meeting Action: Accept
Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:
"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."
This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.
Number Eligible to Vote: 15
Ballot Results: Affirmative: 13 Abstain: 2
Comment on Affirmative:
OHDE: See my Affirmative Comment on Comment 16-34.
Explanation of Abstention:
DORNA: See my Explanation of Abstention for Comment 16-34.
KAHN: See my Explanation of Abstention on Comment 16-34.

16-845 Log #2770 NEC-P16 **Final Action: Accept**
(820.53)

Submitter: Richard Fransen, Daikin America, Inc. / Rep. Cable Fire Research Association
Comment on Proposal No: 16-195
Recommendation: Continue to reject this proposal.
Substantiation: CFRA agrees with the panel action.
Panel Meeting Action: Accept
Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:
"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."
This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.
Number Eligible to Vote: 15
Ballot Results: Affirmative: 13 Abstain: 2
Comment on Affirmative:
OHDE: See my Affirmative Comment on Comment 16-34.
Explanation of Abstention:
DORNA: See my Explanation of Abstention for Comment 16-34.
KAHN: See my Explanation of Abstention on Comment 16-34.

16-846 Log #3092 NEC-P16 **Final Action: Reject**
(820.53)

Submitter: Loren M. Caudill, DuPont Electronic & Comunication Technologies
Comment on Proposal No: 16-177
Recommendation: Continue to accept this proposal in principle.
Substantiation: This allows correlation with other NFPA Standards such as NFPA 90A, NFPA 13 and NFPA 5000.
Panel Meeting Action: Reject
Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:
"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."
This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.
Number Eligible to Vote: 15
Ballot Results: Affirmative: 13 Abstain: 2

Comment on Affirmative:
OHDE: See my Affirmative Comment on Comment 16-34.
Explanation of Abstention:
DORNA: See my Explanation of Abstention for Comment 16-34.
KAHN: See my Explanation of Abstention on Comment 16-34.

16-847 Log #3172 NEC-P16 **Final Action: Accept**
(820.53)

Submitter: Michael I. Callanan, IBEW
Comment on Proposal No: 16-195
Recommendation: Continue to reject.
Substantiation: I agree with the panel action to reject proposal 16-195. No technical substantiation has been provided that a change to the 2002 NEC language is needed or required. This comment represents the official position of the International Brotherhood of Electrical Workers Code and Standards Committee.
Panel Meeting Action: Accept
Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:
"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."
This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.
Number Eligible to Vote: 15
Ballot Results: Affirmative: 13 Abstain: 2
Comment on Affirmative:
OHDE: See my Affirmative Comment on Comment 16-34.
Explanation of Abstention:
DORNA: See my Explanation of Abstention for Comment 16-34.
KAHN: See my Explanation of Abstention on Comment 16-34.

16-848 Log #3570 NEC-P16 **Final Action: Accept in Part**
(820.53)

Submitter: James R. Hoover, DuPont, Electronic & Communication Technologies
Comment on Proposal No: 16-177
Recommendation: Continue to accept this proposal in principle. Add a Fine Print Note to 820.53(A) as follows:
FPN: See 8.14.1.5 of NFPA 13 (2002), Installation of Sprinkler Systems, for requirements for sprinklers in concealed spaces containing exposed combustibles.
Substantiation: Section 8.14.1.5 of NFPA 13 (2002), Installation of Sprinkler Systems states:
8.14.1.5 Localized Protection of Exposed Combustible Construction or Exposed Combustibles. In concealed spaces having exposed combustible construction, or containing exposed combustibles, in localized areas, the combustibles shall be protected as follows:
(1) If the exposed combustibles are in the vertical partitions or walls around all or a portion of the enclosure, a single row of sprinklers spaced not over 12 ft (3.7 m) apart nor more than 6 ft (1.8 m) from the inside of the partition shall be permitted to protect the surface. The first and last sprinklers in such a row shall not be over 5 ft (1.5 m) from the ends of the partitions.
(2) If the exposed combustibles are in the horizontal plane, the area of the combustibles shall be permitted to be protected with sprinklers on a light hazard spacing. Additional sprinklers shall be installed no more than 6 ft (1.8 m) outside the outline of the area and not more than 12 ft (1.8 m) on center along the outline. When the outline returns to a wall or other obstruction, the last sprinkler shall not be more than 6 ft (1.8 m) from the wall or obstruction.
The definition of combustible, from NFPA 5000 is:
3.3.340.2 Combustible (Material). A material that, in the form in which it is used and under the conditions anticipated, will ignite and burn; a material that does not meet the definition of noncombustible or limited-combustible.
3.3.340.10* Limited-Combustible (Material). Refers to a building construction material not complying with the definition of noncombustible material (see 3.3.340.11) that, in the form in which it is used, has a potential heat value not exceeding 3500 Btu/lb (8141 kJ/kg), where tested in accordance with NFPA 259 and includes (1) materials having a structural base of noncombustible material, with a surfacing not exceeding a thickness of 1.8 in. (3.2 mm) that has a flame spread index not greater than 50; and (2) materials, in the form and thickness used, other than as described in (1), having neither a flame spread index greater than 25 nor evidence of continued progressive combustion, and of such composition that surfaces that would be exposed by cutting through material on any plane would have neither a flame spread index greater than 25 nor evidence of continued progressive combustion. [**220:**2.1]
3.3.340.11 Noncombustible Material. A material that, in the form in which it is used and under the conditions anticipated, will not ignite, burn, support combustion, or release flammable vapors, when subjected to fire or heat. Materials that are reported as passing ASTM E 136 are considered noncombustible materials.
Since conventional plenum cables are combustible materials, sprinklers may be required when these cables are installed in concealed spaces in a building with a sprinkler system designed to meet NFPA 13. This Fine Print Note will alert building owners to refer to NFPA 13.
Per the NFPA/NFPRF Technical Report entitled "International Limited Combustible Plenum Cable Fire Test Project", March 2001, there is a very large difference in fire safety performance between plenum cables just meeting the Combustible-Exception requirements and those meeting the much safer Limited Combustible plenum cable requirements per NFPA 90A 2002:
1) Duct cables = Limited Combustibles cables = FHC 25/50/8 (Fire Spread Index / Smoke Developed Index / Potential Heat)
2) Combustible - Exception cables = FHC 25/850 (Fire Spread Index / Smoke Developed Index / "No" Potential Heat requirement)
The NFPA 13 requirements for plenum-sprinklers in sprinklered buildings with Combustible-Exception plenum cables presents recognize the additions fire safety hazards that these combustible plenum cables represent.
Panel Meeting Action: Accept in Part
Add a fine print note to 820.53(A) as follows:
"FPN: See 8.14.1.5 of NFPA 13 (2002), Installation of Sprinkler Systems, for requirements for sprinklers in concealed spaces containing exposed combustibles."
Panel Statement: The panel rejects the recommendation to continue to accept Proposal 16-177 in principle, in accordance with Standards Council Decision Number 03-10-25.
Number Eligible to Vote: 15
Ballot Results: Affirmative: 12 Negative: 3
Explanation of Negative:
JENSEN: I agree with rejecting proposals 16-37, 16-112 and 16-177 in accordance with Standards Council Decision 03-10-25.
As for the FPN, cables and raceways are not the ONLY "noncombustible material" inside ducts, plenums, and other air-handling spaces.
If a building uses an NFPA 13 compliant sprinkler system, then all combustible material (anything, according to NFPA 5000 3.3.340.11, that does not meet ASTM E 136) including "cables and raceways installed in other spaces used for environmental air" will end up with sprinkler protection.
If the owner chooses to avoid installing NFPA 13 compliant sprinkler system protection, then the owner can address this requirement by other means. See 300.22 (C)(1) "...Other types of cables and conductors shall be installed in electrical metallic tubing, flexible metallic tubing, intermediate metal conduit, rigid metal conduit without an overall nonmetallic covering, flexible metal conduit, or, where accessible, surface metal raceway or metal wireway with metal covers or solid bottom metal cable tray with solid metal covers."
This is a design decision on the part of the owner.
If the commenter feels strongly that a FPN sending the reader to NFPA 13 is required, they should resubmit the text as a proposal to change 300.22 during the 2008 revision cycle. JONES: The substantiation provided in the associated Proposal 16-177 used NFPA 90A as part of the reason for the suggested change. The Standards Council made a decision that is identified as Number 03-10-25 plus subsequent letter by the Standards Council Chairman, Phillip DiNenno to Mr. Loren Caudill, dated December 3, 2003, which stated, in pertinent part as follows:
"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."
OHDE: See my Explanation of Negative vote on Comment 16-129.

16-849 Log #3721 NEC-P16 **Final Action: Accept**
(820.53)

Submitter: Marcelo M. Hirschler, GBH International / Rep. Fire Retardant Chemicals Association
Comment on Proposal No: 16-195
Recommendation: Continue rejecting this proposal and make no changes in the terminology of plenum spaces or of "other spaces used for environmental air".
Substantiation: The terminology in NEC 2002 is correct and needs no change. See also the substantiation for my comments on proposal 16-59.
Panel Meeting Action: Accept
Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:

"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."

This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.

Number Eligible to Vote: 15
Ballot Results: Affirmative: 13 Abstain: 2
Comment on Affirmative:
OHDE: See my Affirmative Comment on Comment 16-34.
Explanation of Abstention:
DORNA: See my Explanation of Abstention for Comment 16-34.
KAHN: See my Explanation of Abstention on Comment 16-34.

16-850 Log #2252 NEC-P16 **Final Action: Accept**
(820.53, Figure 820.53 and Table 820.53)

Note: See the Technical Correlating Committee Note on Comment 16-701.
Submitter: T. David Mills, Bechtel Savannah River, Inc.
Comment on Proposal No: 16-196
Recommendation: Reject proposal in its entirety.
Substantiation:NFPA 90A - 2002 only places a restriction for cables and for testing per NFPA 262 for ceiling cavity plenums (4.3.10.2.6.1) and raised floor plenums (4.3.10.6.5.1). It does not state that these are the only places that this plenum rated cable can be used.
The other sections of NFPA 90A related to all other air spaces including "air ducts" are silent with respect to cable requirements. This indicates plenum rated cables can be placed anywhere in the air conditioning air handling system without any new "Duct" designator. There are not any other requirements in NFPA 90A to indicate anywhere that a "does not correlate" situation exists between NFPA 70 and NFPA 90A.There is no need for any additional environmental air space identifiers or cable type designators.
Panel Meeting Action: Accept
Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:

"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."

This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.

Number Eligible to Vote: 15
Ballot Results: Affirmative: 13 Abstain: 2
Comment on Affirmative:
OHDE: See my Affirmative Comment on Comment 16-34.
Explanation of Abstention:
DORNA: See my Explanation of Abstention for Comment 16-34.
KAHN: See my Explanation of Abstention on Comment 16-34.

16-851 Log #3173 NEC-P16 **Final Action: Accept**
(820.53, Figure 820.53 and Table 820.53)

Note: See the Technical Correlating Committee Note on Comment 16-701.
Submitter: Michael I. Callanan, IBEW
Comment on Proposal No: 16-196
Recommendation: Reject this proposal.
Substantiation: This proposal should be rejected as we agree with the explanation of negative of Mr. Jensen, Mr. Jones and Mr. Ohde. This comment represents the official position of the International Brotherhood of Electrical Workers Codes and Standards Committee.
Panel Meeting Action: Accept
Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:

"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."

This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.

Number Eligible to Vote: 15
Ballot Results: Affirmative: 13 Abstain: 2
Comment on Affirmative:
OHDE: See my Affirmative Comment on Comment 16-34.
Explanation of Abstention:
DORNA: See my Explanation of Abstention for Comment 16-34.
KAHN: See my Explanation of Abstention on Comment 16-34.

16-852 Log #3489 NEC-P16 **Final Action: Accept in Principle**
(820.53, FPN)

Submitter: James R. Hoover, DuPont, Electronic & Communication Technologies
Comment on Proposal No: 16-177
Recommendation: Continue to accept this proposal in principle. Add a fine print note to 820.53(A) as follows:

FPN: See section 8.14.1.5 of NFPA 13 (2002) Installation of Sprinkler Systems, for requirements for sprinklers in concealed spaces containing exposed combustibles.

Substantiation: Section 8.14.1.5 of NFPA 13 (2002), Installation of Sprinkler Systems states:

8.14.1.5 Localized Protection of Exposed Combustible Construction or Exposed Combustibles. In concealed spaces having exposed combustible construction, or containing exposed combustibles, in localized areas, the combustibles shall be protected as follows:

(1) If the exposed combustibles are in the vertical partitions of walls around all or a portion of the enclosure, a single row of sprinklers spaced not over 12 ft (3.7 m) apart nor more than 6 ft (1.8 m) from the inside of the partition shall be permitted to protect the surface. The first and last sprinklers in such a row shall not be over 5 ft (1.5 m) from the ends of the partitions.

(2) If the exposed combustibles are in the horizontal plane, the area of the combustibles shall be permitted to be protected with sprinklers on a light hazard spacing. Additional sprinklers shall be installed no more than 6 ft (1.8 m) outside the outline of the area and not more than 12 ft (3.7 m) on center along the outline. When the outline returns to a wall or other obstruction, the last sprinkler shall not be more than 6 ft (1.8 m) from the wall or obstruction.

The definition of combustible, from NFPA 5000 is:

3.3.340.2 Combustible (Material). A material that, in the form in which it is used and under the conditions anticipated, will ignite and burn; a material that does not meet the definition of noncombustible or limited-combustible.

Panel Meeting Action: Accept in Principle
Panel Statement: See panel action and statement on Comment 16-848.
Number Eligible to Vote: 15
Ballot Results: Affirmative: 12 Negative: 3
Explanation of Negative:
JENSEN: I agree with rejecting proposals 16-37, 16-112 and 16-177 in accordance with Standards Council Decision 03-10-25.

As for the FPN, cables and raceways are not the ONLY "noncombustible material" inside ducts, plenums, and other air-handling spaces.

If a building uses an NFPA 13 compliant sprinkler system, then all combustible material (anything, according to NFPA 5000 3.3.340.11, that does not meet ASTM E 136) including "cables and raceways installed in other spaces used for environmental air" will end up with sprinkler protection.

If the owner chooses to avoid installing NFPA 13 compliant sprinkler system protection, then the owner can address this requirement by other means. See 300.22 (C)(1) "...Other types of cables and conductors shall be installed in electrical metallic tubing, flexible metallic tubing, intermediate metal conduit, rigid metal conduit without an overall nonmetallic covering, flexible metal conduit, or, where accessible, surface metal raceway or metal wireway with metal covers or solid bottom metal cable tray with solid metal covers."

This is a design decision on the part of the owner.

If the commenter feels strongly that a FPN sending the reader to NFPA 13 is required, they should resubmit the text as a proposal to change 300.22 during the 2008 revision cycle. JONES: The substantiation provided in the associated Proposal 16-177 used NFPA 90A as part of the reason for the suggested change. The Standards Council made a decision that is identified as Number 03-10-25 plus subsequent letter by the Standards Council Chairman, Phillip DiNenno to Mr. Loren Caudill, dated December 3, 2003, which stated, in pertinent part as follows:

"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."

OHDE: See my Explanation of Negative vote on Comment 16-129.

16-853 Log #2518tttt NEC-P16 **Final Action: Accept**
(820.53(A))

Note: See the Technical Correlating Committee Note on Comment 16-701.
Submitter: Vince Baclawski, National Electrical Manufacturers Association (NEMA)
Comment on Proposal No: 16-199
Recommendation: Reject this proposal.
Substantiation: See our companion comment on Proposal 1-69.
Panel Meeting Action: Accept
Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:
"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."
This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.
Number Eligible to Vote: 15
Ballot Results: Affirmative: 13 Abstain: 2
Comment on Affirmative:
OHDE: See my Affirmative Comment on Comment 16-34.
Explanation of Abstention:
DORNA: See my Explanation of Abstention for Comment 16-34.
KAHN: See my Explanation of Abstention on Comment 16-34.

16-854 Log #1464 NEC-P16 **Final Action: Reject**
(820.53(A))

Submitter: Technical Correlating Committee on Signaling Systems for the Protection of Life and Property
Comment on Proposal No: 16-199
Recommendation: Continue to accept in principle.
Substantiation: See our comment on proposal 16-65.
Panel Meeting Action: Reject
Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:
"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."
This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.
Number Eligible to Vote: 15
Ballot Results: Affirmative: 13 Abstain: 2
Comment on Affirmative:
OHDE: See my Affirmative Comment on Comment 16-34.
Explanation of Abstention:
DORNA: See my Explanation of Abstention for Comment 16-34.
KAHN: See my Explanation of Abstention on Comment 16-34.

16-855 Log #1465 NEC-P16 **Final Action: Reject**
(820.53(A))

Submitter: Technical Correlating Committee on Signaling Systems for the Protection of Life and Property
Comment on Proposal No: 16-200
Recommendation: Continue to accept in principle.
Substantiation: See our comment on proposal 16-65.
Panel Meeting Action: Reject
Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:
"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."
This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.
Number Eligible to Vote: 15
Ballot Results: Affirmative: 13 Abstain: 2
Comment on Affirmative:
OHDE: See my Affirmative Comment on Comment 16-34.
Explanation of Abstention:
DORNA: See my Explanation of Abstention for Comment 16-34.
KAHN: See my Explanation of Abstention on Comment 16-34.

16-856 Log #1466 NEC-P16 **Final Action: Reject**
(820.53(A))

Submitter: Technical Correlating Committee on Signaling Systems for the Protection of Life and Property
Comment on Proposal No: 16-201
Recommendation: Continue to accept in principle.
Substantiation: See our comment on proposal 16-65.
Panel Meeting Action: Reject
Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:
"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."
This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.
Number Eligible to Vote: 15
Ballot Results: Affirmative: 13 Abstain: 2
Comment on Affirmative:
OHDE: See my Affirmative Comment on Comment 16-34.
Explanation of Abstention:
DORNA: See my Explanation of Abstention for Comment 16-34.
KAHN: See my Explanation of Abstention on Comment 16-34.

16-857 Log #1494 NEC-P16 **Final Action: Accept**
(820.53(A))

Note: See the Technical Correlating Committee Note on Comment 16-701.
Submitter: Marcelo M. Hirschler, GBH International / Rep. Fire Retardant Chemicals
Comment on Proposal No: 16-64
Recommendation: Continue rejecting this proposal.
Substantiation: • This comment recommends rejection of a subdivision of "other spaces used for environmental air" and continued rejection of granting priority to NFPA 90A on choices of wiring methods.
• The input from CMP 3 and from the NEC Technical Coordinating Committee makes it clear that the terminology used in 300.22 has served the NEC well and needs no change. It has also become clear now that the expertise needed for choosing the type of wiring systems permitted in any space should be the prerogative of the NEC, which (through its various panels and its Technical Correlating Committee) has greater expertise and a broader view than the Technical Committee on Air Conditioning (responsible for NFPA 90A). Therefore, the NEC panels should continue making their own choices regarding wiring methods.
• It has already been shown in detail by the fire hazard and fire risk analysis presented together with my original proposals (see for example the section on pages 2080-2091 of the NEC-ROP of the substantiation for my proposal 3-130) that there is no need to change the requirements, or limit the application, for wiring methods in plenums, because the fire safety record is excellent.
• I understand that this comment represents a change in some of the concepts the submitter believed when the proposal was submitted, but "even old dogs can learn".
Panel Meeting Action: Accept
Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:
"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that

interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."

This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.

Number Eligible to Vote: 15

Ballot Results: Affirmative: 13 Abstain: 2

Comment on Affirmative:

OHDE: See my Affirmative Comment on Comment 16-34.

Explanation of Abstention:

DORNA: See my Explanation of Abstention for Comment 16-34.

KAHN: See my Explanation of Abstention on Comment 16-34.

16-858 Log #1627 NEC-P16 **Final Action: Reject**
(820.53(A))

Submitter: Richard P. Owen, City of St. Paul, Minnesota

Comment on Proposal No: 16-199

Recommendation: Continue to Accept this Proposal in Principle.

Substantiation: The Panel 3/Panel 16 Task Group, appointed by the NEC TCC, developed this comment.

The task group agrees with Panel 16's action and statement.

The NEC TCC Task Group on Correlation Issues Between Panels 3 and 16 met three times via teleconference calls. The assignment by the TCC Chairman was to attempt to develop a resolution and accompanying comments for the different actions taken on proposals dealing with similar issues by CMP 3 and CMP 16 for their respective Articles in Chapters 7 and 8 of the NEC.

The Task Group studied the issues and determined that there were five major differences in the actions on proposals concerning Articles 725, 760, 770, 800, 820, and 830. The voting on these issues was not unanimous but did pass as at least a simple majority of the Task Group.

One of the major differences involved whether to require air duct cable in a raised floor or ceiling cavity plenum where the cable cannot be extracted upon abandonment. This would reduce fuel load in air handling spaces where cables must remain in place when abandoned by installing a cable with a much lower fire and combustible fuel load in these areas.

The Task Group members who attended the teleconference call voted to accept text that requires cables in non-accessible raised floor and ceiling cavity plenums to be "air duct cables." Comments will be written to incorporate similar text for the articles under the jurisdiction of Panel 3 that will be similar or the same action on this issue as that taken by Panel 16.

The following members of Panels 3 and 16 participated in this Task Group assignment: From Panel 3, Mr. Sanford E. Egesdal representing the Automatic Fire Alarm Association, Inc., Mr. Ronald E. Maassen representing the National Electrical Contractors Association, and Mr. Mark C. Ode representing Underwriters Laboratories Inc. From Panel 16, Mr. Robert W. Jensen representing the Building Industry Consulting Services International, Mr. Harold C. Ohde representing the International Brotherhood of Electrical Workers, and Mr. Joseph W. Rao representing the Independent Electrical Contractors, Inc. Mr. Richard P. Owen, the Chairman of CMP 3, representing the International Association of Electrical Inspectors, was the chairman of the Task Group.

Panel Meeting Action: Reject

Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:

"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."

This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.

Number Eligible to Vote: 15

Ballot Results: Affirmative: 13 Abstain: 2

Comment on Affirmative:

OHDE: See my Affirmative Comment on Comment 16-34.

Explanation of Abstention:

DORNA: See my Explanation of Abstention for Comment 16-34.

KAHN: See my Explanation of Abstention on Comment 16-34.

16-859 Log #1628 NEC-P16 **Final Action: Reject**
(820.53(A))

Submitter: Richard P. Owen, City of St. Paul, Minnesota

Comment on Proposal No: 16-200

Recommendation: Continue to Accept this Proposal in Principle.

Substantiation: The Panel 3/Panel 16 Task Group, appointed by the NEC TCC, developed this comment.

The task group agrees with Panel 16's action and statement.

The NEC TCC Task Group on Correlation Issues Between Panels 3 and 16 met three times via teleconference calls. The assignment by the TCC Chairman was to attempt to develop a resolution and accompanying comments for the different actions taken on proposals dealing with similar issues by CMP 3 and CMP 16 for their respective Articles in Chapters 7 and 8 of the NEC.

The Task Group studied the issues and determined that there were five major differences in the actions on proposals concerning Articles 725, 760, 770, 800, 820, and 830. The voting on these issues was not unanimous but did pass as at least a simple majority of the Task Group.

One of the major differences involved whether to require air duct cable in a raised floor or ceiling cavity plenum where the cable cannot be extracted upon abandonment. This would reduce fuel load in air handling spaces where cables must remain in place when abandoned by installing a cable with a much lower fire and combustible fuel load in these areas.

The Task Group members who attended the teleconference call voted to accept text that requires cables in non-accessible raised floor and ceiling cavity plenums to be "air duct cables." Comments will be written to incorporate similar text for the articles under the jurisdiction of Panel 3 that will be similar or the same action on this issue as that taken by Panel 16.

The following members of Panels 3 and 16 participated in this Task Group assignment: From Panel 3, Mr. Sanford E. Egesdal representing the Automatic Fire Alarm Association, Inc., Mr. Ronald E. Maassen representing the National Electrical Contractors Association, and Mr. Mark C. Ode representing Underwriters Laboratories Inc. From Panel 16, Mr. Robert W. Jensen representing the Building Industry Consulting Services International, Mr. Harold C. Ohde representing the International Brotherhood of Electrical Workers, and Mr. Joseph W. Rao representing the Independent Electrical Contractors, Inc. Mr. Richard P. Owen, the Chairman of CMP 3, representing the International Association of Electrical Inspectors, was the chairman of the Task Group.

Panel Meeting Action: Reject

Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:

"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."

This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.

Number Eligible to Vote: 15

Ballot Results: Affirmative: 13 Abstain: 2

Comment on Affirmative:

OHDE: See my Affirmative Comment on Comment 16-34.

Explanation of Abstention:

DORNA: See my Explanation of Abstention for Comment 16-34.

KAHN: See my Explanation of Abstention on Comment 16-34.

16-860 Log #1629 NEC-P16 **Final Action: Reject**
(820.53(A))

Submitter: Richard P. Owen, City of St. Paul, Minnesota

Comment on Proposal No: 16-201

Recommendation: Continue to Accept in Principle.

Substantiation: The Panel 3/Panel 16 Task Group, appointed by the NEC TCC, developed this comment.

The task group agrees with Panel 16's action and statement.

The NEC TCC Task Group on Correlation Issues Between Panels 3 and 16 met three times via teleconference calls. The assignment by the TCC Chairman was to attempt to develop a resolution and accompanying comments for the different actions taken on proposals dealing with similar issues by CMP 3 and CMP 16 for their respective Articles in Chapters 7 and 8 of the NEC.

The Task Group studied the issues and determined that there were five major differences in the actions on proposals concerning Articles 725, 760, 770, 800, 820, and 830. The voting on these issues was not unanimous but did pass as at least a simple majority of the Task Group.

One of the major differences involved whether to require air duct cable in a raised floor or ceiling cavity plenum where the cable cannot be extracted upon abandonment. This would reduce fuel load in air handling spaces where cables must remain in place when abandoned by installing a cable with a much lower fire and combustible fuel load in these areas.

The Task Group members who attended the teleconference call voted to accept text that requires cables in non-accessible raised floor and ceiling cavity plenums to be "air duct cables." Comments will be written to incorporate similar text for the articles under the jurisdiction of Panel 3 that will be similar or the same action on this issue as that taken by Panel 16.

The following members of Panels 3 and 16 participated in this Task Group assignment: From Panel 3, Mr. Sanford E. Egesdal representing the Automatic Fire Alarm Association, Inc., Mr. Ronald E. Maassen representing the National Electrical Contractors Association, and Mr. Mark C. Ode

representing Underwriters Laboratories Inc. From Panel 16, Mr. Robert W. Jensen representing the Building Industry Consulting Services International, Mr. Harold C. Ohde representing the International Brotherhood of Electrical Workers, and Mr. Joseph W. Rao representing the Independent Electrical Contractors, Inc. Mr. Richard P. Owen, the Chairman of CMP 3, representing the International Association of Electrical Inspectors, was the chairman of the Task Group.

Panel Meeting Action: Reject

Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:

"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."

This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.

Number Eligible to Vote: 15

Ballot Results: Affirmative: 13 Abstain: 2

Comment on Affirmative:

OHDE: See my Affirmative Comment on Comment 16-34.

Explanation of Abstention:

DORNA: See my Explanation of Abstention for Comment 16-34.

KAHN: See my Explanation of Abstention on Comment 16-34.

16-861 Log #1841 NEC-P16 **Final Action: Reject**
(820.53(A))

Submitter: Thomas P. Hammerberg, Automatic Fire Alarm Association

Comment on Proposal No: 16-199

Recommendation: Continue to accept in principle.

Substantiation: See our comment on Proposal 16-65.

Panel Meeting Action: Reject

Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:

"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."

This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.

Number Eligible to Vote: 15

Ballot Results: Affirmative: 13 Abstain: 2

Comment on Affirmative:

OHDE: See my Affirmative Comment on Comment 16-34.

Explanation of Abstention:

DORNA: See my Explanation of Abstention for Comment 16-34.

KAHN: See my Explanation of Abstention on Comment 16-34.

16-862 Log #2257 NEC-P16 **Final Action: Accept**
(820.53(A))

Note: See the Technical Correlating Committee Note on Comment 16-701.

Submitter: T. David Mills, Bechtel Savannah River, Inc.

Comment on Proposal No: 16-199

Recommendation: Reject proposal in its entirety.

Substantiation: N FPA 90A - 2002 only places a restriction for cables and for testing per NFPA 262 for ceiling cavity plenums (4.3.10.2.6.1) and raised floor plenums (4.3.10.6.5.1). It does not state that these are the only places that this plenum rated cable can be used.

The other sections of NFPA 90A related to all other air spaces including "air ducts" are silent with respect to cable requirements. This indicates plenum rated cables can be placed anywhere in the air conditioning air handling system without any new "Duct" designator. There are not any other requirements in NFPA 90A to indicate anywhere that a "does not correlate" situation exists between NFPA 70 and NFPA 90A.There is no need for any additional environmental air space identifiers or cable type designators.

Panel Meeting Action: Accept

Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:

"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."

This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.

Number Eligible to Vote: 15

Ballot Results: Affirmative: 13 Abstain: 2

Comment on Affirmative:

OHDE: See my Affirmative Comment on Comment 16-34.

Explanation of Abstention:

DORNA: See my Explanation of Abstention for Comment 16-34.

KAHN: See my Explanation of Abstention on Comment 16-34.

16-863 Log #2258 NEC-P16 **Final Action: Accept**
(820.53(A))

Note: See the Technical Correlating Committee Note on Comment 16-701.

Submitter: T. David Mills, Bechtel Savannah River, Inc.

Comment on Proposal No: 16-200

Recommendation: Reject proposal in its entirety.

Substantiation: NFPA 90A - 2002 only places a restriction for cables and for testing per NFPA 262 for ceiling cavity plenums (4.3.10.2.6.1) and raised floor plenums (4.3.10.6.5.1). It does not state that these are the only places that this plenum rated cable can be used.

The other sections of NFPA 90A related to all other air spaces including "air ducts" are silent with respect to cable requirements. This indicates plenum rated cables can be placed anywhere in the air conditioning air handling system without any new "Duct" designator. There are not any other requirements in NFPA 90A to indicate anywhere that a "does not correlate" situation exists between NFPA 70 and NFPA 90A.There is no need for any additional environmental air space identifiers or cable type designators.

Panel Meeting Action: Accept

Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:

"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."

This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.

Number Eligible to Vote: 15

Ballot Results: Affirmative: 13 Abstain: 2

Comment on Affirmative:

OHDE: See my Affirmative Comment on Comment 16-34.

Explanation of Abstention:

DORNA: See my Explanation of Abstention for Comment 16-34.

KAHN: See my Explanation of Abstention on Comment 16-34.

16-864 Log #2259 NEC-P16 **Final Action: Accept**
(820.53(A))

Note: See the Technical Correlating Committee Note on Comment 16-701.

Submitter: T. David Mills, Bechtel Savannah River, Inc.

Comment on Proposal No: 16-201

Recommendation: Reject proposal in its entirety.

Substantiation: NFPA 90A - 2002 only places a restriction for cables and for testing per NFPA 262 for ceiling cavity plenums (4.3.10.2.6.1) and raised floor plenums (4.3.10.6.5.1). It does not state that these are the only places that this plenum rated cable can be used.

The other sections of NFPA 90A related to all other air spaces including "air ducts" are silent with respect to cable requirements. This indicates plenum rated cables can be placed anywhere in the air conditioning air handling system without any new "Duct" designator. There are not any other requirements in NFPA 90A to indicate anywhere that a "does not correlate" situation exists between NFPA 70 and NFPA 90A.There is no need for any additional environmental air space identifiers or cable type designators.

Panel Meeting Action: Accept

Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:

"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision

cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."

This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.

Number Eligible to Vote: 15
Ballot Results: Affirmative: 13 Abstain: 2
Comment on Affirmative:
OHDE: See my Affirmative Comment on Comment 16-34.
Explanation of Abstention:
DORNA: See my Explanation of Abstention for Comment 16-34.
KAHN: See my Explanation of Abstention on Comment 16-34.

16-865 Log #2772 NEC-P16 **Final Action: Reject**
(820.53(A))

Submitter: Richard Fransen, Daikin America, Inc. / Rep. Cable Fire Research Association
Comment on Proposal No: 16-199
Recommendation: Continue to accept this proposal in principle.
Substantiation: CFRA agrees with the panel action.
Panel Meeting Action: Reject
Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:

"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."

This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.

Number Eligible to Vote: 15
Ballot Results: Affirmative: 13 Abstain: 2
Comment on Affirmative:
OHDE: See my Affirmative Comment on Comment 16-34.
Explanation of Abstention:
DORNA: See my Explanation of Abstention for Comment 16-34.
KAHN: See my Explanation of Abstention on Comment 16-34.

16-866 Log #2773 NEC-P16 **Final Action: Reject**
(820.53(A))

Submitter: Richard Fransen, Daikin America, Inc. / Rep. Cable Fire Research Association
Comment on Proposal No: 16-200
Recommendation: Continue to accept this proposal in principle.
Substantiation: CFRA agrees with the panel action.
Panel Meeting Action: Reject
Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:

"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."

This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.

Number Eligible to Vote: 15
Ballot Results: Affirmative: 13 Abstain: 2
Comment on Affirmative:
OHDE: See my Affirmative Comment on Comment 16-34.
Explanation of Abstention:
DORNA: See my Explanation of Abstention for Comment 16-34.
KAHN: See my Explanation of Abstention on Comment 16-34.

16-867 Log #2774 NEC-P16 **Final Action: Reject**
(820.53(A))

Submitter: Richard Fransen, Daikin America, Inc. / Rep. Cable Fire Research Association
Comment on Proposal No: 16-201
Recommendation: Continue to accept this proposal in principle.
Substantiation: CFRA agrees with the panel action.
Panel Meeting Action: Reject
Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:

"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."

This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.

Number Eligible to Vote: 15
Ballot Results: Affirmative: 13 Abstain: 2
Comment on Affirmative:
OHDE: See my Affirmative Comment on Comment 16-34.
Explanation of Abstention:
DORNA: See my Explanation of Abstention for Comment 16-34.
KAHN: See my Explanation of Abstention on Comment 16-34.

16-868 Log #2518gggg NEC-P16 **Final Action: Accept**
(820.53(A))

Note: See the Technical Correlating Committee Note on Comment 16-701.
Submitter: Vince Baclawski, National Electrical Manufacturers Association (NEMA)
Comment on Proposal No: 16-200
Recommendation: Reject this proposal.
Substantiation: See our companion comment on Proposal 1-69.
Panel Meeting Action: Accept
Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:

"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."

This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.

Number Eligible to Vote: 15
Ballot Results: Affirmative: 13 Abstain: 2
Comment on Affirmative:
OHDE: See my Affirmative Comment on Comment 16-34.
Explanation of Abstention:
DORNA: See my Explanation of Abstention for Comment 16-34.
KAHN: See my Explanation of Abstention on Comment 16-34.

16-869 Log #3174 NEC-P16 **Final Action: Accept**
(820.53(A))

Note: See the Technical Correlating Committee Note on Comment 16-701.
Submitter: Michael I. Callanan, IBEW
Comment on Proposal No: 16-199
Recommendation: Reject this proposal.
Substantiation: This proposal should be rejected as we agree with the explanation of negative of Mr. Jensen, Mr. Jones and Mr. Ohde. This comment represents the official position of the International Brotherhood of Electrical Workers Codes and Standards Committee.
Panel Meeting Action: Accept
Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:

"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project

on the applicable technical subjects pending completion of the NFPA 90A revision cycle."

This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.

Number Eligible to Vote: 15
Ballot Results: Affirmative: 13 Abstain: 2
Comment on Affirmative:
OHDE: See my Affirmative Comment on Comment 16-34.
Explanation of Abstention:
DORNA: See my Explanation of Abstention for Comment 16-34.
KAHN: See my Explanation of Abstention on Comment 16-34.

16-870 Log #3175 NEC-P16 **Final Action: Accept**
(820.53(A))

Note: See the Technical Correlating Committee Note on Comment 16-701.
Submitter: Michael I. Callanan, IBEW
Comment on Proposal No: 16-200
Recommendation: Reject this proposal.
Substantiation: This proposal should be rejected as we agree with the explanation of negative of Mr. Jensen, Mr. Jones and Mr. Ohde. This comment represents the official position of the International Brotherhood of Electrical Workers Codes and Standards Committee.
Panel Meeting Action: Accept
Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:

"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."

This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.

Number Eligible to Vote: 15
Ballot Results: Affirmative: 13 Abstain: 2
Comment on Affirmative:
OHDE: See my Affirmative Comment on Comment 16-34.
Explanation of Abstention:
DORNA: See my Explanation of Abstention for Comment 16-34.
KAHN: See my Explanation of Abstention on Comment 16-34.

16-871 Log #3176 NEC-P16 **Final Action: Accept**
(820.53(A))

Note: See the Technical Correlating Committee Note on Comment 16-701.
Submitter: Michael I. Callanan, IBEW
Comment on Proposal No: 16-201
Recommendation: Reject this proposal.
Substantiation: This proposal should be rejected as we agree with the explanation of negative of Mr. Jensen, Mr. Jones and Mr. Ohde. This comment represents the official position of the International Brotherhood of Electrical Workers Codes and Standards Committee.
Panel Meeting Action: Accept
Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:

"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."

This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.

Number Eligible to Vote: 15
Ballot Results: Affirmative: 13 Abstain: 2
Comment on Affirmative:
OHDE: See my Affirmative Comment on Comment 16-34.
Explanation of Abstention:
DORNA: See my Explanation of Abstention for Comment 16-34.
KAHN: See my Explanation of Abstention on Comment 16-34.

16-872 Log #3875 NEC-P16 **Final Action: Reject**
(820.53(A) and 820. 53(B)(1))

Submitter: Marcelo M. Hirschler, GBH International / Rep. Fire Retardant Chemicals Association
Comment on Proposal No: 16-141
Recommendation: *There is no consistency in the NEC on the removal of abandoned cables. This is primarily an issue with cables in Articles 645, 725, 760, 770, 800, 820 and 830. The wording should be as follows consistently: "Abandoned [cable type] cables shall be removed." It should also be contained in the section on applications of cables.*

820.53 Applications of Listed CATV Cables. CATV cables shall comply with the requirements of 820.53(A) through (D) or where cable substitutions are made as shown in Table 820.53.

(A) Plenum. Cables installed in ducts, plenums, and other spaces used for environmental air shall be Type CATVP. Abandoned cables shall be removed. Types CATVP, CATVR, CATV, and CATVX cables installed in compliance with 300.22 shall be permitted.

(B) Riser. Cables installed in risers shall comply with any of the requirements of 820.53(B)(1) through (B)(3).

(1) Cables in Vertical Runs. Cables installed in vertical runs and penetrating more than one floor, or cables installed in vertical runs in a shaft, shall be Type CATVR. Floor penetrations requiring Type CATVR shall contain only cables suitable for riser or plenum use. Abandoned cables shall be removed.

By analogy, for consistency, make the same change in 820.53 (D):

(D) Other Wiring Within Buildings. Cables installed in building locations other than the locations covered in 820.53(A) and (B) shall be with any of the requirements in 820.53(D)(1) through (5). Abandoned cables in hollow spaces shall ~~not be permitted to remain~~ be removed.

Substantiation: The issue here is the interpretation of the action required with respect to what is accessible. The issue of "accessible" cables creates confusion that makes the enforcement of the removal of abandoned cable "dicey" because it is unclear what "accessible" means. The NEC defines the following terms in Article 100:

Accessible (as applied to equipment). Admitting close approach; not guarded by locked doors, elevation, or other effective means.

Accessible (as applied to wiring methods). Capable of being removed or exposed without damaging the building structure or finish or not permanently closed in by the structure or finish of the building.

Accessible, Readily (Readily Accessible). Capable of being reached quickly for operation, renewal, or inspections without requiring those to whom ready access is requisite to climb over or remove obstacles or to resort to portable ladders, and so forth.

The phrase "the accessible portion of abandoned cables" is much vaguer than the definitions in the code, because the term "accessible portion" is not defined. Therefore, accessible portion is probably considered that length of cable that is within a few feet of the opening, and that can be cut off by reaching in. That is clearly not the intent of the code provision: the entire length of cable that can be pulled out should be removed.

Another possible interpretation is that this refers to excluding from removal those cables installed in the areas that CMP 16 calls "inaccessible ceiling cavity plenums and inaccessible raised floor plenums". The concept of those "inaccessible areas" was rejected by CMP 3 as inappropriate because there is no known fire safety problem with the present type of wiring methods, but it was approved by CMP 16. If this concept is approved, and the wording of "abandoned cables" includes the "accessible portion" concept, it would clearly mean that the NEC would permit some cables to be left permanently in place once abandoned. This was soundly rejected by the membership several times, in a concept upheld by Standards Council.

It is pretty obvious that the concept of removal of abandoned cable is not one where someone should try to tear down a building or cause structural damage to it just to remove cables "permanently closed in by the structure or finish of the building". I believe that we must trust in the intelligence of our code officials and electrical inspectors that they will not demand such actions. If there is a feeling that this is a possibility (which I cannot believe), it might be worth adding a Fine Print Note to the effect that removal of abandoned cables should not cause structural damage to the building. An example follows:

FPN: Removal of abandoned cables is not intended to cause structural damage to buildings.

Clearly, "the accessible portion of abandoned cables" is a misleading phrase which can lead to abundant misinterpretation. It should be eliminated in favor of the simpler "abandoned cables".

Panel Meeting Action: Reject
Panel Statement: See CMP 16 action and statement on Comment 16-654.
Number Eligible to Vote: 15
Ballot Results: Affirmative: 14 Negative: 1
Explanation of Negative:
OHDE: See my Explanation of Negative vote on Comment 16-654.

16-873 Log #3881 NEC-P16 **Final Action: Reject**
(820.53(A) and 820.53(B)(1))

Submitter: Marcelo M. Hirschler, GBH International / Rep. Fire Retardant Chemicals Association
Comment on Proposal No: 16-202
Recommendation: *There is no consistency in the NEC on the removal of abandoned cables. This is primarily an issue with cables in Articles 645, 725, 760, 770, 800, 820 and 830. The wording should be as follows consistently: "Abandoned [cable type] cables shall be removed." It should also be contained in the section on applications of cables.*

820.53 Applications of Listed CATV Cables. CATV cables shall comply with the requirements of 820.53(A) through (D) or where cable substitutions are made as shown in Table 820.53.

(A) Plenum. Cables installed in ducts, plenums, and other spaces used for environmental air shall be Type CATVP. Abandoned cables shall be removed. Types CATVP, CATVR, CATV, and CATVX cables installed in compliance with 300.22 shall be permitted.

(B) Riser. Cables installed in risers shall comply with any of the requirements of 820.53(B)(1) through (B)(3).

(1) Cables in Vertical Runs. Cables installed in vertical runs and penetrating more than one floor, or cables installed in vertical runs in a shaft, shall be Type CATVR. Floor penetrations requiring Type CATVR shall contain only cables suitable for riser or plenum use. Abandoned cables shall be removed.

Substantiation: The issue here is the interpretation of the action required with respect to what is accessible. The issue of "accessible" cables creates confusion that makes the enforcement of the removal of abandoned cable "dicey" because it is unclear what "accessible" means. The NEC defines the following terms in Article 100:

Accessible (as applied to equipment). Admitting close approach; not guarded by locked doors, elevation, or other effective means.

Accessible (as applied to wiring methods). Capable of being removed or exposed without damaging the building structure or finish or not permanently closed in by the structure or finish of the building.

Accessible, Readily (Readily Accessible). Capable of being reached quickly for operation, renewal, or inspections without requiring those to whom ready access is requisite to climb over or remove obstacles or to resort to portable ladders, and so forth.

The phrase "the accessible portion of abandoned cables" is much vaguer than the definitions in the code, because the term "accessible portion" is not defined. Therefore, accessible portion is probably considered that length of cable that is within a few feet of the opening, and that can be cut off by reaching in. That is clearly not the intent of the code provision: the entire length of cable that can be pulled out should be removed.

Another possible interpretation is that this refers to excluding from removal those cables installed in the areas that CMP 16 calls "inaccessible ceiling cavity plenums and inaccessible raised floor plenums". The concept of those "inaccessible areas" was rejected by CMP 3 as inappropriate because there is no known fire safety problem with the present type of wiring methods, but it was approved by CMP 16. If this concept is approved, and the wording of "abandoned cables" includes the "accessible portion" concept, it would clearly mean that the NEC would permit some cables to be left permanently in place once abandoned. This was soundly rejected by the membership several times, in a concept upheld by Standards Council.

It is pretty obvious that the concept of removal of abandoned cable is not one where someone should try to tear down a building or cause structural damage to it just to remove cables "permanently closed in by the structure or finish of the building". I believe that we must trust in the intelligence of our code officials and electrical inspectors that they will not demand such actions. If there is a feeling that this is a possibility (which I cannot believe), it might be worth adding a Fine Print Note to the effect that removal of abandoned cables should not cause structural damage to the building. An example follows:

FPN: Removal of abandoned cables is not intended to cause structural damage to buildings.

Clearly, "the accessible portion of abandoned cables" is a misleading phrase which can lead to abundant misinterpretation. It should be eliminated in favor of the simpler "abandoned cables".
Panel Meeting Action: Reject
Panel Statement: See CMP 16 action and statement on Comment 16-310.
Number Eligible to Vote: 15
Ballot Results: Affirmative: 14 Negative: 1
Explanation of Negative:
OHDE: See my Explanation of Negative vote on Comment 16-654.

16-874 Log #2921 NEC-P16 **Final Action: Reject**
(820.54 (New))

Submitter: David H. Kendall, Carlon
Comment on Proposal No: 16-204
Recommendation: This proposal should review and reconsidered with the following text:

820.54 Coaxial Device and Equipment Mounting . Coaxial devices or equipment shall be mounted in listed boxes, brackets or assemblies designed for the purpose, and such boxes, brackets or assemblies shall be securely fastened in place.

Substantiation: Devices used with Coaxial cable should be mounted on other means than just the dry wall. Yes, there will be additional cost due to labor and material, but the boxes will supply the necessary fixed mounting for the device and cable. This is an individual opinion developed through conversations with BICSI, IBEW, IAEI and NECA members who have approached me with these concerns. UL has also developed listing requirements for these boxes and brackets.

The panel statement is evidence that it is acceptable to mount these devices directly to the dry wall without any other means of securing the device and needs to be reconsidered.
Panel Meeting Action: Reject
Panel Statement: The submitter has not substantiated that a safety hazard exists. The use of boxes is not always required. The listing of equipment enclosures (boxes) will not, in itself, guarantee a safe and professional installation.

Secure fastening is a workmanship issue and is covered in 820.6.

The same quality of workmanship is necessary, whether or not the enclosure is listed.

It is long-standing practice in the CATV industry to mount cable TV hardware on walls without a box or enclosure. The connector at the end of a coaxial cable is equipment, and it would be impractical to require boxes for every connector.
Number Eligible to Vote: 15
Ballot Results: Affirmative: 15

16-875 Log #39 NEC-P16 **Final Action: Accept in Principle in Part**
(820.83 (New))

Submitter: Stanley Kaufman, CableSafe, Inc.
Comment on Proposal No: 16-175
Recommendation: Continue to accept this proposal in principle with the following changes:

1) Change "coaxial raceways" to "CATV raceways".

2) Create a new section 820.83 "CATV Raceway" for the listing requirements for these new raceways.

3) Add fine print notes for the listing requirements for the raceways.

4) Delete the use requirements for these raceways from this section.

5) Include additional listing requirements beyond fire properties, for example, mechanical.

The new section 820.83 will then read as follows:

(A) Plenum CATV Raceways. Plenum CATV raceways shall be listed for use in ceiling cavity plenums and raised floor plenums and shall also be listed as having adequate fire-resistant and low smoke-producing characteristics.

FPN: See section 4.3.10 of NFPA 90A-2002, Standard for the Installation of Air-Conditioning and Ventilating Systems for listing requirements for plenum cable.

(B) Riser CATV Raceways. Riser CATV raceways shall be listed for use in risers and shall also be listed as having adequate fire-resistant characteristics capable of preventing the carrying of fire from floor to floor.

FPN: One method of defining fire-resistant characteristics capable of preventing the carrying of fire from floor to floor is that the raceways pass the requirements of the Test for Flame Propagation (Riser) in UL 2024, Standard for Optical Fiber Cable Raceway.

(C) General-Purpose CATV Raceways. General-purpose CATV raceways shall be listed suitable for general-purpose use and shall also be listed as being resistant to the spread of fire.

FPN: One method of defining resistance to the spread of fire is that the raceways pass the requirements of the Vertical-Tray Flame Test (General use) in UL 2024, Standard for Optical Fiber Cable Raceway.
Substantiation: Proposal 16-194 changed "coaxial raceways" to "CATV raceways". Action on this section needs to be consistent. Creating a new section 820.83 "CATV Raceway" will keep the sections numbers in Article 820 consistent with Articles 770 and 800. Use requirements were deleted because they do not belong in a listing section. The mechanical listing requirements were added because the listing process must be comprehensive. The fine print notes were taken from Proposals 16-50 and 16-53 and from a comment from the Technical Committee on Air Conditioning on Proposal 16-128.

Panel Meeting Action: Accept in Principle in Part

Replace new Section 820.83(A) and its FPN to read as follows:"(A) Plenum CATV Raceways. Plenum CATV raceways shall be listed for use in other spaces used for environmental air and shall also be listed as having adequate fire-resistant and low smoke-producing characteristics.""FPN: One method of defining that an optical fiber raceway is a low smoke producing raceway and a fire-resistant raceway is that the raceway exhibits a maximum peak optical density of 0.5 or less, an average optical density of 0.15 or less, and a maximum flame spread distance of 1.52 m (5 ft) or less when tested in accordance with the plenum test in UL 2024, Standard for Optical Fiber Cable Raceway."

Panel Statement: The submitter's Section (A) and its FPN were rejected to correlate with committee action to Comment 16-246. CMP 16 provided new text.

The words "ceiling cavity plenums and raised floor plenums" were replaced with "other spaces used for environmental air" in accordance with Standards Council Decision Number 03-10-25.

Number Eligible to Vote: 15

Ballot Results: Affirmative: 15

ARTICLE 830 — NETWORK-POWERED BROADBAND COMMUNICATIONS

16-876 Log #273 NEC-P16 **Final Action: Accept**
(830.3)

Submitter: Technical Committee on Air Conditioning

Comment on Proposal No: 16-207

Recommendation: Continue to reject this proposal.

Substantiation: The Technical Committee on Air Conditioning agrees with the panel reject statement.

This comment is one in a series of comments including 16-12, 16-40, 16-60, 16-83, 16-115, 16-132, 16-138, 16-156, 16-180, 16-188, 16-195, 16-207, 16-209, 16-211, 16-228, 16-229, and 16-234.

Panel Meeting Action: Accept

Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:

"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."

This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.

Number Eligible to Vote: 15

Ballot Results: Affirmative: 13 Abstain: 2

Comment on Affirmative:

OHDE: See my Affirmative Comment on Comment 16-34.

Explanation of Abstention:

DORNA: See my Explanation of Abstention for Comment 16-34.

KAHN: See my Explanation of Abstention on Comment 16-34.

16-877 Log #1768 NEC-P16 **Final Action: Reject**
(830.3)

Submitter: Richard P. Owen, City of St. Paul, Minnesota

Comment on Proposal No: 16-211

Recommendation: Continue to Accept in Principle in Part.

Substantiation: The Panel 3/Panel 16 Task Group, appointed by the NEC TCC, developed this comment.

The task group agrees with Panel 16's action and statement.

By accepting the majority of the suggested changes in a submitted comment for Proposal 3-94, "Other Spaces for Environmental Air" has been further subdivided into two separate spaces, ceiling cavity and raised floor plenums but the Panel still has maintained the electrical industry terminology associated with these spaces. Providing this further subdivision will enhance the usability of the NEC by making it easier to determine what other spaces are being referenced in this section. It will also improve correlation between the NEC and NFPA 90A.

The following members of Panels 3 and 16 participated in this Task Group assignment: From Panel 3, Mr. Sanford E. Egesdal representing the Automatic Fire Alarm Association, Inc., Mr. Ronald E. Maassen representing the National Electrical Contractors Association, and Mr. Mark C. Ode representing Underwriters Laboratories Inc. From Panel 16, Mr. Robert W. Jensen representing the Building Industry Consulting Services International, Mr. Harold C. Ohde representing the International Brotherhood of Electrical Workers, and Mr. Joseph W. Rao representing the Independent Electrical Contractors, Inc. Mr. Richard P. Owen, the Chairman of CMP 3, representing the International Association of Electrical Inspectors, was the chairman of the Task Group.

Panel Meeting Action: Reject

Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:

"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."

This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.

Number Eligible to Vote: 15

Ballot Results: Affirmative: 13 Abstain: 2

Comment on Affirmative:

OHDE: See my Affirmative Comment on Comment 16-34.

Explanation of Abstention:

DORNA: See my Explanation of Abstention for Comment 16-34.

KAHN: See my Explanation of Abstention on Comment 16-34.

16-878 Log #1776 NEC-P16 **Final Action: Accept**
(830.3)

Submitter: Richard P. Owen, City of St. Paul, Minnesota

Comment on Proposal No: 16-207

Recommendation: Continue to reject.

Substantiation: The Panel 3/Panel 16 Task Group, appointed by the NEC TCC, developed this comment.

The task group agrees with Panel 16's action and statement.

By accepting the majority of the suggested changes in a submitted comment for Proposal 3-94, "Other Spaces for Environmental Air" has been further subdivided into two separate spaces, ceiling cavity and raised floor plenums but the Panel still has maintained the electrical industry terminology associated with these spaces. Providing this further subdivision will enhance the usability of the NEC by making it easier to determine what other spaces are being referenced in this section. It will also improve correlation between the NEC and NFPA 90A.

The following members of Panels 3 and 16 participated in this Task Group assignment: From Panel 3, Mr. Sanford E. Egesdal representing the Automatic Fire Alarm Association, Inc., Mr. Ronald E. Maassen representing the National Electrical Contractors Association, and Mr. Mark C. Ode representing Underwriters Laboratories Inc. From Panel 16, Mr. Robert W. Jensen representing the Building Industry Consulting Services International, Mr. Harold C. Ohde representing the International Brotherhood of Electrical Workers, and Mr. Joseph W. Rao representing the Independent Electrical Contractors, Inc. Mr. Richard P. Owen, the Chairman of CMP 3, representing the International Association of Electrical Inspectors, was the chairman of the Task Group.

Panel Meeting Action: Accept

Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:

"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."

This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.

Number Eligible to Vote: 15

Ballot Results: Affirmative: 13 Abstain: 2

Comment on Affirmative:

OHDE: See my Affirmative Comment on Comment 16-34.

Explanation of Abstention:

DORNA: See my Explanation of Abstention for Comment 16-34.

KAHN: See my Explanation of Abstention on Comment 16-34.

16-879 Log #1777 NEC-P16 **Final Action: Reject**
(830.3)

Submitter: Richard P. Owen, City of St. Paul, Minnesota
Comment on Proposal No: 16-209
Recommendation: Continue to Accept in Principle in Part.
Substantiation: The Panel 3/Panel 16 Task Group, appointed by the NEC TCC, developed this comment.
The task group agrees with Panel 16's action and statement.
By accepting the majority of the suggested changes in a submitted comment for Proposal 3-94, "Other Spaces for Environmental Air" has been further subdivided into two separate spaces, ceiling cavity and raised floor plenums but the Panel still has maintained the electrical industry terminology associated with these spaces. Providing this further subdivision will enhance the usability of the NEC by making it easier to determine what other spaces are being referenced in this section. It will also improve correlation between the NEC and NFPA 90A.
The following members of Panels 3 and 16 participated in this Task Group assignment: From Panel 3, Mr. Sanford E. Egesdal representing the Automatic Fire Alarm Association, Inc., Mr. Ronald E. Maassen representing the National Electrical Contractors Association, and Mr. Mark C. Ode representing Underwriters Laboratories Inc. From Panel 16, Mr. Robert W. Jensen representing the Building Industry Consulting Services International, Mr. Harold C. Ohde representing the International Brotherhood of Electrical Workers, and Mr. Joseph W. Rao representing the Independent Electrical Contractors, Inc. Mr. Richard P. Owen, the Chairman of CMP 3, representing the International Association of Electrical Inspectors, was the chairman of the Task Group.
Panel Meeting Action: Reject
Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:
"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."
This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.
Number Eligible to Vote: 15
Ballot Results: Affirmative: 13 Abstain: 2
Comment on Affirmative:
OHDE: See my Affirmative Comment on Comment 16-34.
Explanation of Abstention:
DORNA: See my Explanation of Abstention for Comment 16-34.
KAHN: See my Explanation of Abstention on Comment 16-34.

16-880 Log #2775 NEC-P16 **Final Action: Accept**
(830.3)

Submitter: Richard Fransen, Daikin America, Inc. / Rep. Cable Fire Research Association
Comment on Proposal No: 16-207
Recommendation: Continue to reject this proposal.
Substantiation: CFRA agrees with the panel action.
Panel Meeting Action: Accept
Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:
"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."
This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.
Number Eligible to Vote: 15
Ballot Results: Affirmative: 13 Abstain: 2
Comment on Affirmative:
OHDE: See my Affirmative Comment on Comment 16-34.
Explanation of Abstention:
DORNA: See my Explanation of Abstention for Comment 16-34.
KAHN: See my Explanation of Abstention on Comment 16-34.

16-881 Log #2518uuuu NEC-P16 **Final Action: Accept**
(830.3)

Submitter: Vince Baclawski, National Electrical Manufacturers Association (NEMA)
Comment on Proposal No: 16-209
Recommendation: Reject this proposal.
Substantiation: See our companion comment on Proposal 1-69.
Panel Meeting Action: Accept
Number Eligible to Vote: 15
Ballot Results: Affirmative: 13 Abstain: 2
Comment on Affirmative:
OHDE: See my Affirmative Comment on Comment 16-34.
Explanation of Abstention:
DORNA: See my Explanation of Abstention for Comment 16-34.
KAHN: See my Explanation of Abstention on Comment 16-34.

16-882 Log #3177 NEC-P16 **Final Action: Accept**
(830.3)

Submitter: Michael I. Callanan, IBEW
Comment on Proposal No: 16-207
Recommendation: Continue to reject.
Substantiation: I agree with the panel action to reject proposal 16-195. No technical substantiation has been provided that a change to the 2002 NEC language is needed or required. This comment represents the official position of the International Brotherhood of Electrical Workers Code and Standards Committee.
Panel Meeting Action: Accept
Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:
"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."
This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.
Number Eligible to Vote: 15
Ballot Results: Affirmative: 13 Abstain: 2
Comment on Affirmative:
OHDE: See my Affirmative Comment on Comment 16-34.
Explanation of Abstention:
DORNA: See my Explanation of Abstention for Comment 16-34.
KAHN: See my Explanation of Abstention on Comment 16-34.

16-883 Log #3855 NEC-P16 **Final Action: Reject**
(830.3)

Submitter: Marcelo M. Hirschler, GBH International / Rep. Fire Retardant Chemicals Association
Comment on Proposal No: 16-207
Recommendation: Revise to read as follows:
830.3 Locations and Other Articles. Circuits and equipment shall comply with 830.3(A) through (D).
(A) Spread of Fire or Products of Combustion. Section 300.21 shall apply. The accessible portion of abandoned network-powered broadband communications cables shall not be permitted to remain.
(B) Ducts, Plenums, and Other Air-Handling Spaces. Section 300.22 shall apply, where installed in ducts or plenums or other spaces used for environmental air. Wiring methods installed in spaces covered by Section 300.22 (C) shall be permitted to extend not more than 150 mm (6 in.) beyond the limits of the space into a space covered by section 300.22 (B). Wiring methods installed in spaces covered by Section 300.22 (C) shall also be permitted to extend not more than 150 mm (6 in.) into inaccessible spaces covered by section 300.22 (C).
Exception: As permitted in 830.55(B)
No changes proposed to 830.3 (C) through 830.3 (D).
Do not make any other changes to section 830.3, including restrictions in the use of plenum cables.
Substantiation: This comment has two main objectives: (1) improving on the original proposal, which had as its primary intent to make it clear that wiring systems should be permitted to extend up to 6 inches into a more restrictive environment, without developing any limitations for their use in less restrictive environments and (2) recommending no change in the applications of the wiring methods to be used in ducts, plenums and other air-handling spaces.

Explanation:
* It is important that installers of wiring in plenums and other spaces used for environmental air be able to complete installations without having to change wiring methods in order to terminate their installation just outside the plenum area, because that will help them and prevent unwarranted increases in wiring installation costs. There are multiple examples in the NEC where materials are permitted to extend slightly beyond the original space, including the following: 110.26 (3), 210.52 (5) Exception, 300.50 (A) Exceptions 2 and 3, 426.22 (b), 520.42, 550.13 (G) (3), and Table 830.12. Moreover, the concept of using 6 inches as a small distance is used over 30 times in the NEC.
* This comment recognizes that CMP 16 has introduced a new concept: "inaccessible areas" of plenum spaces (or of "other spaces used for environmental air") with the intention of prohibiting some 300.22 (C) wiring methods from being used in those areas. That concept has not been approved by CMP 3 and I support that rejection. However if continued to be accepted by CMP 16 and then approved by the membership and by Standards Council, the revised articles 770, 800, 820 and 830 in NEC-2005 would contain the concept of "inaccessible areas" and create confusion by forcing some users to keep changing wiring methods as they work their way through plenums. Acceptance of this comment would solve that problem. Of course, even if the concept of "inaccessible"areas of plenum spaces is ultimately rejected (as I feel it should), that part of this comment could then still be a useful clarification or could be eliminated after the fact by the membership, the NEC Technical Correlating Committee or Standards Council.
* This comment recommends continued rejection of a subdivision of "other spaces used for environmental air" and continued rejection of granting priority to NFPA 90A on choices of wiring methods.
* The input from CMP 3 and from the NEC Technical Coordinating Committee makes it clear that the terminology used in 300.22 has served the NEC well and needs no change. It has also become clear now that the expertise needed for choosing the type of wiring systems permitted in any space should be the prerogative of the NEC, which (through its various panels and its Technical Correlating Committee) has greater expertise and a broader view than the Technical Committee on Air Conditioning (responsible for NFPA 90A). Therefore, as a member of the Technical Committee on Air Conditioning, I believe the NEC panels should continue making their own choices regarding wiring methods.
* It has already been shown in detail by the fire hazard and fire risk analysis presented together with my original proposals (see for example the section on pages 2427-2431 of the NEC-ROP of the substantiation for this proposal of mine) that there is no need to change the requirements, or limit the application, for wiring methods in plenums, because the fire safety record is excellent.
This comment is one of a series of comments on Articles 300, 725, 760, 770, 800, 820 and 830, regarding "plenum cables". The philosophy behind all the comments is that the NEC is OK as published in 2002, but that 2 minor changes might represent improvements: (i) the clarification of the 6 inch extension of a wiring method into a more restricted environment and (ii) the clarification in the Fine Print Notes that a cable listed to NFPA 262 is listed both based on its "low-smoke" characteristics and its "low-flame-spread" characteristics, and that the two are not listed separately.
Also see comments from the chairman of the Technical Correlating Committee.

Panel Meeting Action: Reject

Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:
"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."
This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.

Number Eligible to Vote: 15

Ballot Results: Affirmative: 13 Abstain: 2

Comment on Affirmative:
OHDE: See my Affirmative Comment on Comment 16-34.

Explanation of Abstention:
DORNA: See my Explanation of Abstention for Comment 16-34.
KAHN: See my Explanation of Abstention on Comment 16-34.

16-884 Log #1487 NEC-P16 **Final Action: Accept in Principle**
(830.3(B))

Submitter: Marcelo M. Hirschler, GBH International / Rep. Fire Retardant Chemicals

Comment on Proposal No: 16-15

Recommendation: Continue rejecting this proposal.

Substantiation: • This comment recommends rejection of a subdivision of "other spaces used for environmental air" and continued rejection of granting priority to NFPA 90A on choices of wiring methods.
• The input from CMP 3 and from the NEC Technical Coordinating Committee makes it clear that the terminology used in 300.22 has served the NEC well and needs no change. It has also become clear now that the expertise needed for choosing the type of wiring systems permitted in any space should be the prerogative of the NEC, which (through its various panels and its Technical Correlating Committee) has greater expertise and a broader view than the Technical Committee on Air Conditioning (responsible for NFPA 90A). Therefore, the NEC panels should continue making their own choices regarding wiring methods.
• It has already been shown in detail by the fire hazard and fire risk analysis presented together with my original proposals (see for example the section on pages 2080-2091 of the NEC-ROP of the substantiation for my proposal 3-130) that there is no need to change the requirements, or limit the application, for wiring methods in plenums, because the fire safety record is excellent.
• I understand that this comment represents a change in some of the concepts the submitter believed when the proposal was submitted, but "even old dogs can learn".

Panel Meeting Action: Accept in Principle

Panel Statement: See CMP 16 action on Comment 16-42.

Number Eligible to Vote: 15

Ballot Results: Affirmative: 15

16-885 Log #1320 NEC-P16 **Final Action: Accept**
(830.5)

Submitter: Wayne G. Carson, Carson Assoc. Inc.

Comment on Proposal No: 16-209

Recommendation: Reject proposal.

Substantiation: This proposal introduces new terms "ceiling cavity plenums" and "raised floor plenums" which are not defined in the Code and are not needed. This issue is adequately addressed in 300.22. There is no technical justification provided for why this change is necessary.

Panel Meeting Action: Accept

Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:
"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.

Number Eligible to Vote: 15

Ballot Results: Affirmative: 13 Abstain: 2

Comment on Affirmative:
OHDE: See my Affirmative Comment on Comment 16-34.

Explanation of Abstention:
DORNA: See my Explanation of Abstention for Comment 16-34.
KAHN: See my Explanation of Abstention on Comment 16-34.

16-886 Log #3178 NEC-P16 **Final Action: Reject**
(830.5)

Submitter: Michael I. Callanan, IBEW

Comment on Proposal No: 16-209

Recommendation: Continue to reject.

Substantiation: I agree with the panel action to reject proposal 16-195. No technical substantiation has been provided that a change to the 2002 NEC language is needed or required. This comment represents the official position of the International Brotherhood of Electrical Workers Code and Standards Committee.

Panel Meeting Action: Reject

Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:
"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."
This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.

Number Eligible to Vote: 15

Ballot Results: Affirmative: 13 Abstain: 2

Comment on Affirmative:
OHDE: See my Affirmative Comment on Comment 16-34.
Explanation of Abstention:
DORNA: See my Explanation of Abstention for Comment 16-34.
KAHN: See my Explanation of Abstention on Comment 16-34.

16-887 Log #3179 NEC-P16 **Final Action: Accept**
(830.5(A)(1), (A) (2) and FPN)

Submitter: Michael I. Callanan, IBEW
Comment on Proposal No: 16-211
Recommendation: Reject this proposal.
Substantiation: This proposal should be rejected as we agree with the explanation of negative of Mr. Jensen and Mr. Jones. This comment represents the official position of the International Brotherhood of Electrical Workers Codes and Standards Committee.
Panel Meeting Action: Accept
Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:
"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."
This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.
Number Eligible to Vote: 15
Ballot Results: Affirmative: 13 Abstain: 2
Comment on Affirmative:
OHDE: See my Affirmative Comment on Comment 16-34.
Explanation of Abstention:
DORNA: See my Explanation of Abstention for Comment 16-34.
KAHN: See my Explanation of Abstention on Comment 16-34.

16-888 Log #266 NEC-P16 **Final Action: Reject**
(830.5(A)(1) and A(2) and FPN)

Submitter: Technical Committee on Air Conditioning
Comment on Proposal No: 16-211
Recommendation: Continue to accept this proposal in principle in part.
Substantiation: The Technical Committee on Air Conditioning agrees with the panel statement.
This comment is one in a series of comments including 16-12, 16-40, 16-60, 16-83, 16-115, 16-132, 16-138, 16-156, 16-180, 16-188, 16-195, 16-207, 16-209, 16-211, 16-228, 16-229, and 16-234.
Panel Meeting Action: Reject
Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:
"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."
This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.
Number Eligible to Vote: 15
Ballot Results: Affirmative: 13 Abstain: 2
Comment on Affirmative:
OHDE: See my Affirmative Comment on Comment 16-34.
Explanation of Abstention:
DORNA: See my Explanation of Abstention for Comment 16-34.
KAHN: See my Explanation of Abstention on Comment 16-34.

16-889 Log #2776 NEC-P16 **Final Action: Reject**
(830.5(A)(1) and A (2), FPN)

Submitter: Richard Fransen, Daikin America, Inc. / Rep. Cable Fire Research Association
Comment on Proposal No: 16-211
Recommendation: Continue to accept this proposal in principle in part.
Substantiation: CFRA agrees with the panel action.
Panel Meeting Action: Reject
Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:
"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."
This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.
Number Eligible to Vote: 15
Ballot Results: Affirmative: 13 Abstain: 2
Comment on Affirmative:
OHDE: See my Affirmative Comment on Comment 16-34.
Explanation of Abstention:
DORNA: See my Explanation of Abstention for Comment 16-34.
KAHN: See my Explanation of Abstention on Comment 16-34.

16-890 Log #1491 NEC-P16 **Final Action: Accept**
(830.5(A)(2))

Note: See the Technical Correlating Committee Note on Comment 16-106.
Submitter: Marcelo M. Hirschler, GBH International / Rep. Fire Retardant Chemicals
Comment on Proposal No: 16-46
Recommendation: Continue rejecting this proposal.
Substantiation: • This comment recommends rejection of a subdivision of "other spaces used for environmental air" and continued rejection of granting priority to NFPA 90A on choices of wiring methods.
• The input from CMP 3 and from the NEC Technical Coordinating Committee makes it clear that the terminology used in 300.22 has served the NEC well and needs no change. It has also become clear now that the expertise needed for choosing the type of wiring systems permitted in any space should be the prerogative of the NEC, which (through its various panels and its Technical Correlating Committee) has greater expertise and a broader view than the Technical Committee on Air Conditioning (responsible for NFPA 90A). Therefore, the NEC panels should continue making their own choices regarding wiring methods.
• It has already been shown in detail by the fire hazard and fire risk analysis presented together with my original proposals (see for example the section on pages 2080-2091 of the NEC-ROP of the substantiation for my proposal 3-130) that there is no need to change the requirements, or limit the application, for wiring methods in plenums, because the fire safety record is excellent.
• I understand that this comment represents a change in some of the concepts the submitter believed when the proposal was submitted, but "even old dogs can learn".
Panel Meeting Action: Accept
Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:
"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."
This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.
Number Eligible to Vote: 15
Ballot Results: Affirmative: 13 Abstain: 2
Comment on Affirmative:
OHDE: See my Affirmative Comment on Comment 16-34.
Explanation of Abstention:
DORNA: See my Explanation of Abstention for Comment 16-34.
KAHN: See my Explanation of Abstention on Comment 16-34.

16-891 Log #3731 NEC-P16 **Final Action: Accept in Part**
(830.5(A)(2), FPN 2)

Submitter: Marcelo M. Hirschler, GBH International / Rep. Fire Retardant Chemicals Association
Comment on Proposal No: 16-209
Recommendation: 830.5 Network Powered Broadband Communications Equipment and Cables.
Network powered broadband communications equipment and cables shall be listed as suitable for the purpose.

Exception No. 1: This listing requirement shall not apply to community antenna television and radio distribution system coaxial cables that were installed prior to January 1, 2000, in accordance with Article 820 and are used for low power network powered broadband communications circuits. See 830.9.
Exception No. 2: Substitute cables for network powered broadband communications cables shall be permitted as shown in Table 830.58.
(A) Listing and Marking. Listing and marking of network powered broadband communications cables shall comply with 830.5(A)(1) or (A)(2).
(1) Type BMU, Type BM, and Type BMR Cables. Network powered broadband communications medium power underground cable, Type BMU; network powered broadband communications medium power cable, Type BM; and network powered broadband communications medium power riser cable, Type BMR, shall be factory assembled cables consisting of a jacketed coaxial cable, a jacketed combination of coaxial cable and multiple individual conductors, or a jacketed combination of an optical fiber cable and multiple individual conductors. The insulation for the individual conductors shall be rated for 300 volts minimum. Cables intended for outdoor use shall be listed as suitable for the application. Cables shall be marked in accordance with 310.11. Type BMU cables shall be jacketed and listed as being suitable for outdoor underground use. Type BM cables shall be listed as being suitable for general purpose use, with the exception of risers and plenums, and shall also be listed as being resistant to the spread of fire. Type BMR cables shall be listed as being suitable for use in a vertical run in a shaft or from floor to floor and shall also be listed as having fire resistant characteristics capable of preventing the carrying of fire from floor to floor.

FPN No. 1: One method of defining resistant to spread of fire is that the cables do not spread fire to the top of the tray in the vertical tray flame test in ANSI/UL 1581 1991, Reference Standard for Electrical Wires, Cables and Flexible Cords. Another method of defining resistant to the spread of fire is for the damage (char length) not to exceed 1.5 m (4 ft 11 in.) when performing the CSA vertical flame test for cables in cable trays, as described in CSA C22.2 No. 0.3 M 1985, Test Methods for Electrical Wires and Cables.
FPN No. 2: One method of defining fire resistant characteristics capable of preventing the carrying of fire from floor to floor is that the cables pass the requirements of ANSI/UL 1666 1997, Standard Test for Flame Propagation Height of Electrical and Optical Fiber Cable Installed Vertically in Shafts.

(2) Type BLU, Type BLX, and Type BLP Cables. Network powered broadband communications low power underground cable, Type BLU; limited use network powered broadband communications low power cable, Type BLX; and network powered broadband communications low power plenum cable, Type BLP, shall be factory assembled cables consisting of a jacketed coaxial cable, a jacketed combination of coaxial cable and multiple individual conductors, or a jacketed combination of an optical fiber cable and multiple individual conductors. The insulation for the individual conductors shall be rated for 300 volts minimum. Cables intended for outdoor use shall be listed as suitable for the application. Cables shall be marked in accordance with 310.11. Type BLU cables shall be jacketed and listed as being suitable for outdoor underground use. Type BLX limited use cables shall be listed as being suitable for use outside, for use in dwellings, and for use in raceways and shall also be listed as being resistant to flame spread. Type BLP cables shall be listed as being suitable for use in ducts, plenums, and other spaces for environmental air and shall also be listed as having adequate fire resistant and low smoke producing characteristics.
FPN No. 1: One method of determining that cable is resistant to flame spread is by testing the cable to VW 1 (vertical wire) flame test in ANSI/UL 1581 1991, Reference Standard for Electrical Wires, Cables and Flexible Cords.
FPN No. 2: One method of defining a cable that is low smoke producing cable and fire-resistant cable is that the cable exhibits a maximum peak optical density of 0.5 or less, an average optical density of 0.15 or less, and a maximum flame spread distance of 1.52 m (5 ft) or less when tested in accordance with NFPA 262, Standard Method of Test for Flame Travel and Smoke of Wires and Cables for Use in Air Handling Spaces. ~~by establishing an acceptable value of the smoke produced when tested in accordance with NFPA 262-1999, Standard Method of Test for Flame Travel and Smoke of Wires and Cables for Use in Air Handling Spaces, to a maximum peak optical density of 0.5 and a maximum average optical density of 0.15. Similarly, one method of defining fire resistant cables is by establishing a maximum allowable flame travel distance of 1.52 m (5 ft) when tested in accordance with the same test.~~

Substantiation: This comment recommends a slight change in wording for the existing Fine Print Note, by recognizing that listing of plenum cable by NFPA 262 represents listing to both low smoke and low flame spread, and that cables cannot be listed separately to either property. This is basically an editorial change, as a clarification, to the existing Fine Print Note.

This comment also recommends a rejection of the initial concept in the proposal to reference NFPA 90A, which would mean that requirements for these cables could change without the knowledge and assent of NEC CMP members.

It has become clear now that the expertise needed for choosing the type of wiring systems permitted in any space should be the prerogative of the NEC, which (through its various panels and its Technical Correlating Committee) has greater expertise and a broader view than the Technical Committee on Air Conditioning (responsible for NFPA 90A). Therefore, the NEC panels should continue making their own choices regarding wiring methods. The issue of correlation (or even reference) to either NFPA 90A or the categories of plenums used in NFPA 90A should continue to be rejected by CMP 3. As stated by Mr. Harold Ohde in his negative on CMP 16 action on proposal 16-9: "Other codes should not be deciding on the typed of wiring methods to be used in these spaces. The electrical experts are capable of doing this and it is covered quite well in 300.22. The more we let those outside of the NEC make these decisions the more we weaken adoption of the NEC. In addition, we could make the change and there is nothing that requires a jurisdiction to even adopt 90A."

This comment is one of a series of comments on Articles 300, 725, 760, 770, 800, 820 and 830, regarding "plenum cables". The philosophy behind all the comments is that the NEC is OK as published in 2002, but that 2 minor changes might represent improvements: (i) the clarification of the 6 inch extension of a wiring method into a more restricted environment and (ii) the clarification in the Fine Print Notes that a cable listed to NFPA 262 is listed both based on its "low-smoke" characteristics and its "low-flame-spread" characteristics, and that the two are not listed separately.

I understand that this comment represents a change in some of the concepts the submitter believed when the proposal was submitted, but "even old dogs can learn".

See attached comments from the chairman of the Technical Correlating Committee.

Panel Meeting Action: Accept in Part

Change FPN No. 2 to read as follows:

"FPN No. 2: One method of defining a cable that is low smoke producing cable and fire-resistant cable is that the cable exhibits a maximum peak optical density of 0.5 or less, an average optical density of 0.15 or less, and a maximum flame spread distance of 1.52 m (5 ft) or less when tested in accordance with NFPA 262, Standard Method of Test for Flame Travel and Smoke of Wires and Cables for Use in Air Handling Spaces."

Panel Statement: Panel 16 accepts the the revised wording to FPN No. 2. Acceptance of the remainder of the text could cause a conflict with other proposals dealing with this section.

Number Eligible to Vote: 15

Ballot Results: Affirmative: 14 Negative: 1

Explanation of Negative:

JONES: The substantiation provided in the associated Proposal 16-209 used NFPA 90A as part of the reason for the suggested change. The Standards Council made a decision that is identified as Number 03-10-25 plus subsequent letter by the Standards Council Chairman, Phillip DiNenno to Mr. Loren Caudill, dated December 3, 2003, which stated, in pertinent part as follows:

"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."

16-892 Log #3138 NEC-P16 **Final Action: Accept**
(830.6)

Submitter: Michael I. Callanan, IBEW
Comment on Proposal No: 16-213
Recommendation: Continue to reject.
Substantiation: We agree with both the panel action and the panel statement to reject proposal 16-213. This comment represents the official position of the International Brotherhood of Electrical Workers Codes and Standards Committee.
Panel Meeting Action: Accept
Number Eligible to Vote: 15
Ballot Results: Affirmative: 15

16-893 Log #954 NEC-P16 **Final Action: Reject**
(830.7)

Submitter: Dorothy Kellogg, American Chemistry Council
Comment on Proposal No: 16-216
Recommendation: The installation shall also conform with 300.4(D) ~~and 300.11.~~
Substantiation: The inclusion of 300.11 into 830.7 introduces overly restrictive requirements. Panel 16 added the reference to 300.11, but did not furnish any technical support that a safety issue exists justifying the additional installation requirements of 300.11.
Panel Meeting Action: Reject
Panel Statement: Section 300.11 is appropriate for all cables regardless of whether the cable is an optical fiber cable, communications cable, coaxial cable, or network-powered broadband cable.
Number Eligible to Vote: 15
Ballot Results: Affirmative: 10 Negative: 5
Explanation of Negative:

BRUNSSEN: Comment 16-893 should be accepted. The securing and support requirements of 300.11 are overly restrictive and are inappropriate for network-powered broadband communications systems. Network-powered broadband cables are terminated at the Network Interface Unit (NIU), typically

on the exterior of the building or structure, and are not generally routed within buildings. It is at the NIU that all the services, e.g., telecom, CATV, date, etc., are derived. The wiring from the NIU into the interior of the building or structure is then telecom, CATV, and data wiring, as appropriate, that is low voltage DC (e.g., 48 volts), power-limited and of smaller diameter and weight than power cables. Such added requirements serve only to unnecessarily increase installation costs. The Panel has cited neither a hazard nor provided technical justification for the addition of the reference to 300.11. Note that the Panel acknowledges in the Panel Statement for comment 16-895 regarding the very same issue: "CMP 16 understands that the proposal as modified by the panel is not the original intent of the submitter. However, the panel sustains its action."

DORNA: I agree and support Mr. Brunssen's explanation on this comment.

HUGHES: This comment should have been accepted. Imposing the requiremnts of NEC 300.11 for this application will result in unnecessary supports being required by the Code. 300.11 is intended to apply to power wiring and not the cabling covered in the scope of this Article. JOHNSON: I agree with the submitter's substantiation in this comment. Compliance with Section 300.11 is overly restrictive for applications of coaxial cable installations. 300.11 is appropriate for power assemblies which are larger and heavier than coaxial cables. Coaxial cables are smaller in diameter and lighter weight. There is no justification to disallow supporting an additional coaxial cable by lashing it to an existing bundle of properly supported cables. Additional coaxial cables will not cause undue strain on the existing cable support system.

JONES: No evidence or technical support was provided showing that a need or a safety issue exists justifying the reference to the additional installation requirements or 300.11. The panel has acknowleded that this additional requirement was not the intent of the submitter of the original proposal. No attempt was made by the panel to create a panel proposal that would flag this insertion during the comment stage.**Comment on Affirmative:**

OHDE: See my Affirmative Comment on Comment 16-70.

16-894 Log #3135 NEC-P16 **Final Action: Accept**
(830.7)

Submitter: Michael I. Callanan, IBEW
Comment on Proposal No: 16-210
Recommendation: This proposal should be continued to be accepted in principle.
Substantiation: We agree with both the panel action and the panel statement. 300-11 is appropriate for all cables regardless if the cable is a network broadband cable assembly or power cable assembly. The addition of the FPN is appropriate and a good reference for installing cables. This comment represents the official position of the International Brotherhood of Electrical Workers Codes and Standards Committee.
Panel Meeting Action: Accept
Number Eligible to Vote: 15
Ballot Results: Affirmative: 10 Negative: 5
Explanation of Negative:

BRUNSSEN: Comment 16-894 should be rejected, as well as the addition of the reference to 300.11 added by the Panel in Proposal 16-216. The securing and support requirements of 300.11 are overly restrictive and are inappropriate for network-powered broadband communications systems. Network-powered broadband cables are terminated at the Network Interface Unit (NIU), typically on the exterior of the building or structure, and are not generally routed within buildings. It is at the NIU that all the services, e.g., telecom, CATV, date, etc., are derived. The wiring from the NIU into the interior of the building or structure is then telecom, CATV, and data wiring, as appropriate, that is low voltage DC (e.g., 48 volts), power-limited and of smaller diameter and weight than power cables. Such added requirements serve only to unnecessarily increase installation costs. The Panel has cited neither a hazard nor provided technical justification for the addition of the reference to 300.11. Note that the Panel acknowledges in the Panel Statement for comment 16-895 regarding the very same issue: "CMP 16 understands that the proposal as modified by the panel is not the original intent of the submitter. However, the panel sustains its action."

DORNA: I agree and support Mr. Brunssen's explanation on this comment.

HUGHES: This comment should have been accepted. Imposing the requiremnts of NEC 300.11 for this application will result in unnecessary supports being required by the Code. 300.11 is intended to apply to power wiring and not the cabling covered in the scope of this Article. JOHNSON: Compliance with Section 300.11 is overly restrictive for applications of coaxial cable installations. 300.11 is appropriate for power assemblies which are larger and heavier than coaxial cables. Coaxial cables are smaller in diameter and lighter weight. There is no justification to disallow supporting an additional coaxial cable by lashing it to an existing bundle of properly supported cables. Additional coaxial cables will not cause undue strain on the existing cable support system.

JONES: See my explanation of negative vote on Comment 16-70.
Comment on Affirmative:

OHDE: See my Affirmative Comment on Comment 16-70.

16-895 Log #1200 NEC-P16 **Final Action: Reject**
(830.7(new 830-8))

Submitter: James E. Brunssen, Telcordia Technologies, Inc.
Comment on Proposal No: 16-216
Recommendation: Revise text to read as follows:

In the final sentence of the CMP 16 rewrite of 830.7, delete the text "and 300.11" as follows: "The installation shall also conform with 300.4(D) ~~and 300.11.~~"

Substantiation: Network-powered broadband communications systems consist of a cable to bring the signal and any needed power from the communications network to the Network Interface Unit located on the exterior of the building or structure. From that point on within the building or structure, the premises wiring and cabling is identical to that for optical fiber cables, communications cables, and coaxial CATV cables of Articles 770, 800, and 820, respectively. Modifications to installations would involve the addition of only a single, or a most, a limited number of small cables. It is overly restrictive to specify that each addition of a single optical fiber, communications, or coaxial CATV cable require installation of additional and separate supports. (See my comments on proposals 16-81, 16-20, and 16-160. Further, the panel did not provide substantiation for the addition of the reference to 300.11, and as the submitter of the original proposal, the addition of the reference to 300.11 does not meet my intent.
Panel Meeting Action: Reject
Panel Statement: CMP 16 understands that the proposal as modified by the panel is not the original intent of the submitter. However, the panel sustains its action.

Section 300.11 is appropriate for all cables, regardless of whether the cable is an optical fiber cable, communications cable, coaxial cable, or network-powered broadband cable.
Number Eligible to Vote: 15
Ballot Results: Affirmative: 10 Negative: 5
Explanation of Negative:

BRUNSSEN: Comment 16-895 should be accepted. The securing and support requirements of 300.11 are overly restrictive and are inappropriate for network-powered broadband communications systems. Network-powered broadband cables are terminated at the Network Interface Unit (NIU), typically on the exterior of the building or structure, and are not generally routed within buildings. It is at the NIU that all the services, e.g., telecom, CATV, date, etc., are derived. The wiring from the NIU into the interior of the building or structure is then telecom, CATV, and data wiring, as appropriate, that is low voltage DC (e.g., 48 volts), power-limited and of smaller diameter and weight than power cables. Such added requirements serve only to unnecessarily increase installation costs. The Panel has cited neither a hazard nor provided technical justification for the addition of the reference to 300.11. Note that the Panel acknowledges in the Panel Statement: "CMP 16 understands that the proposal as modified by the panel is not the original intent of the submitter. However, the panel sustains its action."

DORNA: I agree and support Mr. Brunssen's explanation on this comment.

HUGHES: This comment should have been accepted. Imposing the requiremnts of NEC 300.11 for this application will result in unnecessary supports being required by the Code. 300.11 is intended to apply to power wiring and not the cabling covered in the scope of this Article. JOHNSON: I agree with Mr. Brunssen's substantiation in this comment. Compliance with Section 300.11 is overly restrictive for applications of coaxial cable installations. 300.11 is appropriate for power assemblies which are larger and heavier than coaxial cables. Coaxial cables are smaller in diameter and lighter weight. There is no justification to disallow supporting an additional coaxial cable by lashing it to an existing bundle of properly supported cables. Additional coaxial cables will not cause undue strain on the existing cable support system.

JONES: See my explanation of negative vote on Comment 16-70.
Comment on Affirmative:

OHDE: See my Affirmative Comment on Comment 16-70.

16-896 Log #2159 NEC-P16 **Final Action: Accept in Principle in Part**
(830.8)

Submitter: Robert W. Jensen, dbi-Telecommunications
Comment on Proposal No: 16-216
Recommendation: Continue to accept this proposal in principle.
Delete text as follows:
Delete "and 300.11" from the last sentence.
Substantiation: Reference to 300.11 is inappropriate for network powered broadband communications cables. These cables do not have to be "securely fastened in place" in order to have a safe installation.
Panel Meeting Action: Accept in Principle in Part
CMP 16 accepts that part of the comment that is to accept the proposal in principle.
CMP 16 rejects the deletion of "and 300.11".
Panel Statement: Section 300.11 is appropriate for all cables, regardless of whether the cable is an optical fiber cable, communications cable, coaxial cable, or network-powered broadband cable.
Number Eligible to Vote: 15
Ballot Results: Affirmative: 10 Negative: 5
Explanation of Negative:
BRUNSSEN: Comment 16-896 should be accepted. The securing and support requirements of 300.11 are overly restrictive and are inappropriate for network-powered broadband communications systems. Network-powered broadband cables are terminated at the Network Interface Unit (NIU), typically on the exterior of the building or structure, and are not generally routed within buildings. It is at the NIU that all the services, e.g., telecom, CATV, date, etc., are derived. The wiring from the NIU into the interior of the building or structure is then telecom, CATV, and data wiring, as appropriate, that is low voltage DC (e.g., 48 volts), power-limited and of smaller diameter and weight than power cables. Such added requirements serve only to unnecessarily increase installation costs. The Panel has cited neither a hazard nor provided technical justification for the addition of the reference to 300.11. Note that the Panel acknowledges in the Panel Statement for comment 16-895 regarding the very same issue: "CMP 16 understands that the proposal as modified by the panel is not the original intent of the submitter. However, the panel sustains its action."
DORNA: I agree and support Mr. Brunssen's explanation on this comment.
HUGHES: This comment should have been accepted. Imposing the requiremnts of NEC 300.11 for this application will result in unnecessary supports being required by the Code. 300.11 is intended to apply to power wiring and not the cabling covered in the scope of this Article. JOHNSON: Compliance with Section 300.11 is overly restrictive for applications of coaxial cable installations. 300.11 is appropriate for power assemblies which are larger and heavier than coaxial cables. Coaxial cables are smaller in diameter and lighter weight. There is no justification to disallow supporting an additional coaxial cable by lashing it to an existing bundle of properly supported cables. Additional coaxial cables will not cause undue strain on the existing cable support system.
JONES: See my explanation of negative vote on Comment 16-70.
Comment on Affirmative:
OHDE: See my Affirmative Comment on Comment 16-70.

16-897 Log #667 NEC-P16 **Final Action: Accept**
(830.12(A))

Submitter: Charles M. Trout, Maron Electric Co. Inc.
Comment on Proposal No: 16-86
Recommendation: This proposal should be accepted.
Substantiation: The term "handhole enclosure" will be used in 314.15 Exception, 300.15(L), 314.29, and 314.1 based on the unanimous acceptance of Proposals 9-15, 9-18, 9-23, 9-68 and 3-78. Based on those acceptances, it is more than probable that the term handhole enclosure will be added to Article 100 as a new definition.
Panel Meeting Action: Accept
Number Eligible to Vote: 15
Ballot Results: Affirmative: 15

16-898 Log #2 NEC-P16 **Final Action: Reject**
(830.40(A)(4))

Submitter: Steven C. Johnson, Time Warner Cable / Rep. National Cable Telecommunications Association
Comment on Proposal No: 16-224
Recommendation: Delete the following proposed FPN:
"FPN: Similar grounding conductor length limitations applied at apartment buildings and commercial buildings will help to reduce voltages that may be developed between the building's power and communications systems during lightning events."
Substantiation: The proposed maximum grounding conductor length of 20 ft was chosen somewhat arbitrarily. There was no evidence presented to indicate that the current requirement of "as short as practicable" has been less than sufficient from a safety standpoint.
Panel Meeting Action: Reject
Panel Statement: Inclusion of the FPN would encourage the application of the 20-foot rule to apartment and commercial buildings, thereby helping to reduce voltages that may develop between the building's power and communications systems during lightning events.
Number Eligible to Vote: 15
Ballot Results: Affirmative: 14 Negative: 1
Explanation of Negative:
JOHNSON: My contention remains that the proposed maximum grounding conductor length of 20 feet was chosen somewhat arbitrarily. There was no evidence presented to indicate that the current requirement of "as short as practicable" has been less than sufficient from a safety standpoint.
Comment on Affirmative:
BRUNSSEN: Continued rejection of this comment will help to reduce voltages that may be developed between the building's power and network-powered broadband communications systems during lightning events.

16-899 Log #1199 NEC-P16 **Final Action: Accept**
(830.40(A)(4))

Submitter: James E. Brunssen, Telcordia Technologies, Inc.
Comment on Proposal No: 16-224
Recommendation: CMP 16 is urged to continue to accept proposal 16-224. Also, in the draft of the 2005 NEC, place the FPN prior to the Exception, to correlate with 800.40(A)(4) and 820.40(A)(4.)
Substantiation: By continuing to accept proposal 16-224, the added FPN will encourage the application of the 20-foot rule to apartment buildings and commercial buildings and will help reduce voltages that may be developed between the building's power and communications systems during lightning events. The wording of the FPN, as accepted by CMP 16, is not in violation of the NEC style manual as it is merely informative and does not contain mandatory language.
Panel Meeting Action: Accept
Number Eligible to Vote: 15
Ballot Results: Affirmative: 14 Negative: 1
Explanation of Negative:
JOHNSON: My contention remains that the proposed maximum grounding conductor length of 20 feet was chosen somewhat arbitrarily. There was no evidence presented to indicate that the current requirement of "as short as practicable" has been less than sufficient from a safety standpoint.
Comment on Affirmative:
BRUNSSEN: Continued acceptance of this comment, as well as the original proposal, will help to reduce voltages that may be developed between the building's power and network-powered broadband communications systems during lightning events.

16-900 Log #257 NEC-P16 **Final Action: Accept**
(830.54)

Submitter: Technical Committee on Air Conditioning
Comment on Proposal No: 16-228
Recommendation: Continue to reject this proposal.
Substantiation: The Technical Committee on Air Conditioning agrees with the panel reject statement.
This comment is one in a series of comments including 16-12, 16-40, 16-60, 16-83, 16-115, 16-132, 16-138, 16-156, 16-180, 16-188, 16-195, 16-207, 16-209, 16-211, 16-228, 16-229 and 16-234.
Panel Meeting Action: Accept
Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:
"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."
This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.

Number Eligible to Vote: 15
Ballot Results: Affirmative: 13 Abstain: 2
Comment on Affirmative:
OHDE: See my Affirmative Comment on Comment 16-34.
Explanation of Abstention:
DORNA: See my Explanation of Abstention for Comment 16-34.
KAHN: See my Explanation of Abstention on Comment 16-34.

16-901 Log #1709 NEC-P16 **Final Action: Accept**
(830.54)

Submitter: Richard P. Owen, City of St. Paul, Minnesota
Comment on Proposal No: 16-228
Recommendation: Continue to reject.
Substantiation: The Panel 3/Panel 16 Task Group, appointed by the NEC TCC, developed this comment.

The task group agrees with Panel 16's action and statement.

By accepting the majority of the suggested changes in a submitted comment for Proposal 3-94, "Other Spaces for Environmental Air" has been further subdivided into two separate spaces, ceiling cavity and raised floor plenums but the Panel still has maintained the electrical industry terminology associated with these spaces. Providing this further subdivision will enhance the usability of the NEC by making it easier to determine what other spaces are being referenced in this section. It will also improve correlation between the NEC and NFPA 90A.

The following members of Panels 3 and 16 participated in this Task Group assignment: From Panel 3, Mr. Sanford E. Egesdal representing the Automatic Fire Alarm Association, Inc., Mr. Ronald E. Maassen representing the National Electrical Contractors Association, and Mr. Mark C. Ode representing Underwriters Laboratories Inc. From Panel 16, Mr. Robert W. Jensen representing the Building Industry Consulting Services International, Mr. Harold C. Ohde representing the International Brotherhood of Electrical Workers, and Mr. Joseph W. Rao representing the Independent Electrical Contractors, Inc. Mr. Richard P. Owen, the Chairman of CMP 3, representing the International Association of Electrical Inspectors, was the chairman of the Task Group.
Panel Meeting Action: Accept
Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:

"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."

This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.
Number Eligible to Vote: 15
Ballot Results: Affirmative: 13 Abstain: 2
Comment on Affirmative:
OHDE: See my Affirmative Comment on Comment 16-34.
Explanation of Abstention:
DORNA: See my Explanation of Abstention for Comment 16-34.
KAHN: See my Explanation of Abstention on Comment 16-34.

16-902 Log #1710 NEC-P16 **Final Action: Accept**
(830.54)

Submitter: Richard P. Owen, City of St. Paul, Minnesota
Comment on Proposal No: 16-229
Recommendation: Continue to reject.
Substantiation: The Panel 3/Panel 16 Task Group, appointed by the NEC TCC, developed this comment.

The task group agrees with Panel 16's action and statement.

By accepting the majority of the suggested changes in a submitted comment for Proposal 3-94, "Other Spaces for Environmental Air" has been further subdivided into two separate spaces, ceiling cavity and raised floor plenums but the Panel still has maintained the electrical industry terminology associated with these spaces. Providing this further subdivision will enhance the usability of the NEC by making it easier to determine what other spaces are being referenced in this section. It will also improve correlation between the NEC and NFPA 90A.

The following members of Panels 3 and 16 participated in this Task Group assignment: From Panel 3, Mr. Sanford E. Egesdal representing the Automatic Fire Alarm Association, Inc., Mr. Ronald E. Maassen representing the National Electrical Contractors Association, and Mr. Mark C. Ode representing Underwriters Laboratories Inc. From Panel 16, Mr. Robert W. Jensen representing the Building Industry Consulting Services International, Mr. Harold C. Ohde representing the International Brotherhood of Electrical Workers, and Mr. Joseph W. Rao representing the Independent Electrical Contractors, Inc. Mr. Richard P. Owen, the Chairman of CMP 3, representing the International Association of Electrical Inspectors, was the chairman of the Task Group.
Panel Meeting Action: Accept
Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:

"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."

This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.
Number Eligible to Vote: 15
Ballot Results: Affirmative: 13 Abstain: 2
Comment on Affirmative:
OHDE: See my Affirmative Comment on Comment 16-34.
Explanation of Abstention:
DORNA: See my Explanation of Abstention for Comment 16-34.
KAHN: See my Explanation of Abstention on Comment 16-34.

16-903 Log #2777 NEC-P16 **Final Action: Accept**
(830.54)

Submitter: Richard Fransen, Daikin America, Inc. / Rep. Cable Fire Research Association
Comment on Proposal No: 16-228
Recommendation: Continue to reject this proposal.
Substantiation: CFRA agrees with the panel action.
Panel Meeting Action: Accept
Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:

"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."

This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.
Number Eligible to Vote: 15
Ballot Results: Affirmative: 13 Abstain: 2
Comment on Affirmative:
OHDE: See my Affirmative Comment on Comment 16-34.
Explanation of Abstention:
DORNA: See my Explanation of Abstention for Comment 16-34.
KAHN: See my Explanation of Abstention on Comment 16-34.

16-904 Log #3180 NEC-P16 **Final Action: Accept**
(830.54)

Submitter: Michael I. Callanan, IBEW
Comment on Proposal No: 16-228
Recommendation: Continue to reject.
Substantiation: I agree with the panel action to reject proposal 16-195. No technical substantiation has been provided that a change to the 2002 NEC language is needed or required. This comment represents the official position of the International Brotherhood of Electrical Workers Code and Standards Committee.
Panel Meeting Action: Accept
Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:

"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."

This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.

Number Eligible to Vote: 15
Ballot Results: Affirmative: 13 Abstain: 2
Comment on Affirmative:
OHDE: See my Affirmative Comment on Comment 16-34.
Explanation of Abstention:
DORNA: See my Explanation of Abstention for Comment 16-34.
KAHN: See my Explanation of Abstention on Comment 16-34.

16-905 Log #3723 NEC-P16 **Final Action: Accept**
(830.54)

Submitter: Marcelo M. Hirschler, GBH International / Rep. Fire Retardant Chemicals Association
Comment on Proposal No: 16-228
Recommendation: Continue rejecting this proposal and make no changes in the terminology of plenum spaces or of "other spaces used for environmental air".
Substantiation: The terminology in NEC 2002 is correct and needs no change. See also the substantiation for my comments on proposal 16-59.
Panel Meeting Action: Accept
Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:

"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."

This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.

Number Eligible to Vote: 15
Ballot Results: Affirmative: 13 Abstain: 2
Comment on Affirmative:
OHDE: See my Affirmative Comment on Comment 16-34.
Explanation of Abstention:
DORNA: See my Explanation of Abstention for Comment 16-34.
KAHN: See my Explanation of Abstention on Comment 16-34.

16-906 Log #258 NEC-P16 **Final Action: Accept**
(830.55)

Submitter: Technical Committee on Air Conditioning
Comment on Proposal No: 16-229
Recommendation: Continue to reject this proposal.
Substantiation: The Technical Committee on Air Conditioning agrees with the panel reject statement.

This comment is one in a series of comments including 16-12, 16-40, 16-60, 16-83, 16-115, 16-132, 16-138, 16-156, 16-180, 16-188, 16-195, 16-207, 16-209, 16-211, 16-228, 16-229 and 16-234.

Panel Meeting Action: Accept
Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:

"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."

This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.

Number Eligible to Vote: 15
Ballot Results: Affirmative: 13 Abstain: 2
Comment on Affirmative:
OHDE: See my Affirmative Comment on Comment 16-34.
Explanation of Abstention:
DORNA: See my Explanation of Abstention for Comment 16-34.
KAHN: See my Explanation of Abstention on Comment 16-34.

16-907 Log #2778 NEC-P16 **Final Action: Accept**
(830.55)

Submitter: Richard Fransen, Daikin America, Inc. / Rep. Cable Fire Research Association
Comment on Proposal No: 16-229
Recommendation: Continue to reject this proposal.
Substantiation: CFRA agrees with the panel reject action.
Panel Meeting Action: Accept
Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:

"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."

This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.

Number Eligible to Vote: 15
Ballot Results: Affirmative: 13 Abstain: 2
Comment on Affirmative:
OHDE: See my Affirmative Comment on Comment 16-34.
Explanation of Abstention:
DORNA: See my Explanation of Abstention for Comment 16-34.
KAHN: See my Explanation of Abstention on Comment 16-34.

16-908 Log #3181 NEC-P16 **Final Action: Accept**
(830.55)

Submitter: Michael I. Callanan, IBEW
Comment on Proposal No: 16-229
Recommendation: Continue to reject.
Substantiation: I agree with the panel action to reject proposal 16-195. No technical substantiation has been provided that a change to the 2002 NEC language is needed or required. This comment represents the official position of the International Brotherhood of Electrical Workers Code and Standards Committee.
Panel Meeting Action: Accept
Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:

"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."

This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.

Number Eligible to Vote: 15
Ballot Results: Affirmative: 13 Abstain: 2
Comment on Affirmative:
OHDE: See my Affirmative Comment on Comment 16-34.
Explanation of Abstention:
DORNA: See my Explanation of Abstention for Comment 16-34.
KAHN: See my Explanation of Abstention on Comment 16-34.

16-909 Log #3728 NEC-P16 **Final Action: Accept**
(830.55)

Submitter: Marcelo M. Hirschler, GBH International / Rep. Fire Retardant Chemicals Association
Comment on Proposal No: 16-229
Recommendation: Continue rejecting this proposal and make no changes in the terminology of plenum spaces or of "other spaces used for environmental air".

Substantiation: The terminology in NEC 2002 is correct and needs no change. See also the substantiation for my comments on proposal 16-59.
Panel Meeting Action: Accept
Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:

"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."

This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.
Number Eligible to Vote: 15
Ballot Results: Affirmative: 13 Abstain: 2
Comment on Affirmative:
OHDE: See my Affirmative Comment on Comment 16-34.
Explanation of Abstention:
DORNA: See my Explanation of Abstention for Comment 16-34.
KAHN: See my Explanation of Abstention on Comment 16-34.

16-910 Log #1495 NEC-P16 **Final Action: Accept**
(830.55(B))

Note: See the Technical Correlating Committee Note on Comment 16-106.
Submitter: Marcelo M. Hirschler, GBH International / Rep. Fire Retardant Chemicals
Comment on Proposal No: 16-64
Recommendation: Continue rejecting this proposal.
Substantiation: • This comment recommends rejection of a subdivision of "other spaces used for environmental air" and continued rejection of granting priority to NFPA 90A on choices of wiring methods.

• The input from CMP 3 and from the NEC Technical Coordinating Committee makes it clear that the terminology used in 300.22 has served the NEC well and needs no change. It has also become clear now that the expertise needed for choosing the type of wiring systems permitted in any space should be the prerogative of the NEC, which (through its various panels and its Technical Correlating Committee) has greater expertise and a broader view than the Technical Committee on Air Conditioning (responsible for NFPA 90A). Therefore, the NEC panels should continue making their own choices regarding wiring methods.

• It has already been shown in detail by the fire hazard and fire risk analysis presented together with my original proposals (see for example the section on pages 2080-2091 of the NEC-ROP of the substantiation for my proposal 3-130) that there is no need to change the requirements, or limit the application, for wiring methods in plenums, because the fire safety record is excellent.

• I understand that this comment represents a change in some of the concepts the submitter believed when the proposal was submitted, but "even old dogs can learn".
Panel Meeting Action: Accept
Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:

"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."

This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.
Number Eligible to Vote: 15
Ballot Results: Affirmative: 13 Abstain: 2
Comment on Affirmative:
OHDE: See my Affirmative Comment on Comment 16-34.
Explanation of Abstention:
DORNA: See my Explanation of Abstention for Comment 16-34.
KAHN: See my Explanation of Abstention on Comment 16-34.

16-911 Log #3876 NEC-P16 **Final Action: Reject**
(830.55(B), 830.55(C)(1))

Submitter: Marcelo M. Hirschler, GBH International / Rep. Fire Retardant Chemicals Association
Comment on Proposal No: 16-141
Recommendation: *There is no consistency in the NEC on the removal of abandoned cables. This is primarily an issue with cables in Articles 645, 725, 760, 770, 800, 820 and 830. The wording should be as follows consistently: "Abandoned [cable type] cables shall be removed." It should also be contained in the section on applications of cables.*

830.55 Low-Power Network-Powered Broadband Communications System Wiring Methods. Low-power network-powered broadband communications systems shall comply with any of the requirements of 830.55(A) through (D).

(A) In Buildings. Low-power network-powered broadband communications systems shall be installed within buildings using listed Type BLX or Type BLP network-powered broadband communications low power cables.

(B) Ducts, Plenums, and Other Air-Handling Spaces. Cables installed in ducts, plenums, and other spaces used for environmental air shall be Type BLP. Abandoned cables shall be removed. Type BLX cable installed in compliance with 300.22 shall be permitted.

(C) Riser. Cables installed in risers shall comply with any of the requirements in 830.55(C)(1), (C)(2), or (C)(3).

(1) Cables in Vertical Runs. Cables installed in vertical runs and penetrating more than one floor, or cables installed in vertical runs in a shaft, shall be Type BLP or BMR. Floor penetrations requiring Type BMR shall contain only cables suitable for riser or plenum use. Abandoned cables shall be removed.
Substantiation: The issue here is the interpretation of the action required with respect to what is accessible. The issue of "accessible" cables creates confusion that makes the enforcement of the removal of abandoned cable "dicey" because it is unclear what "accessible" means. The NEC defines the following terms in Article 100:

Accessible (as applied to equipment). Admitting close approach; not guarded by locked doors, elevation, or other effective means.

Accessible (as applied to wiring methods). Capable of being removed or exposed without damaging the building structure or finish or not permanently closed in by the structure or finish of the building.

Accessible, Readily (Readily Accessible). Capable of being reached quickly for operation, renewal, or inspections without requiring those to whom ready access is requisite to climb over or remove obstacles or to resort to portable ladders, and so forth.

The phrase "the accessible portion of abandoned cables" is much vaguer than the definitions in the code, because the term "accessible portion" is not defined. Therefore, accessible portion is probably considered that length of cable that is within a few feet of the opening, and that can be cut off by reaching in. That is clearly not the intent of the code provision: the entire length of cable that can be pulled out should be removed.

Another possible interpretation is that this refers to excluding from removal those cables installed in the areas that CMP 16 calls "inaccessible ceiling cavity plenums and inaccessible raised floor plenums". The concept of those "inaccessible areas" was rejected by CMP 3 as inappropriate because there is no known fire safety problem with the present type of wiring methods, but it was approved by CMP 16. If this concept is approved, and the wording of "abandoned cables" includes the "accessible portion" concept, it would clearly mean that the NEC would permit some cables to be left permanently in place once abandoned. This was soundly rejected by the membership several times, in a concept upheld by Standards Council.

It is pretty obvious that the concept of removal of abandoned cable is not one where someone should try to tear down a building or cause structural damage to it just to remove cables "permanently closed in by the structure or finish of the building". I believe that we must trust in the intelligence of our code officials and electrical inspectors that they will not demand such actions. If there is a feeling that this is a possibility (which I cannot believe), it might be worth adding a Fine Print Note to the effect that removal of abandoned cables should not cause structural damage to the building. An example follows:

FPN: Removal of abandoned cables is not intended to cause structural damage to buildings.

Clearly, "the accessible portion of abandoned cables" is a misleading phrase which can lead to abundant misinterpretation. It should be eliminated in favor of the simpler "abandoned cables".
Panel Meeting Action: Reject
Panel Statement: See CMP 16 action and statement on Comment 16-310.
Number Eligible to Vote: 15
Ballot Results: Affirmative: 14 Negative: 1
Explanation of Negative:
OHDE: See my Explanation of Negative vote on Comment 16-654.

16-912 Log #3880 NEC-P16 **Final Action: Reject**
(830.55(B)830.55(C)(1))

Submitter: Marcelo M. Hirschler, GBH International / Rep. Fire Retardant Chemicals Association
Comment on Proposal No: 16-230
Recommendation: There is no consistency in the NEC on the removal of abandoned cables. This is primarily an issue with cables in Articles 645, 725, 760, 770, 800, 820 and 830. The wording should be as follows consistently: "Abandoned [cable type] cables shall be removed." It should also be contained in the section on applications of cables.

830.55 Low-Power Network-Powered Broadband Communications System Wiring Methods. Low-power network-powered broadband communications systems shall comply with any of the requirements of 830.55(A) through (D).

(A) In Buildings. Low-power network-powered broadband communications systems shall be installed within buildings using listed Type BLX or Type BLP network-powered broadband communications low power cables.

(B) Ducts, Plenums, and Other Air-Handling Spaces. Cables installed in ducts, plenums, and other spaces used for environmental air shall be Type BLP. Abandoned cables shall be removed. Type BLX cable installed in compliance with 300.22 shall be permitted.

(C) Riser. Cables installed in risers shall comply with any of the requirements in 830.55(C)(1), (C)(2), or (C)(3).

(1) Cables in Vertical Runs. Cables installed in vertical runs and penetrating more than one floor, or cables installed in vertical runs in a shaft, shall be Type BLP or BMR. Floor penetrations requiring Type BMR shall contain only cables suitable for riser or plenum use. Abandoned cables shall be removed.

Substantiation: The issue here is the interpretation of the action required with respect to what is accessible. The issue of "accessible" cables creates confusion that makes the enforcement of the removal of abandoned cable "dicey" because it is unclear what "accessible" means. The NEC defines the following terms in Article 100:

Accessible (as applied to equipment). Admitting close approach; not guarded by locked doors, elevation, or other effective means.

Accessible (as applied to wiring methods). Capable of being removed or exposed without damaging the building structure or finish or not permanently closed in by the structure or finish of the building.

Accessible, Readily (Readily Accessible). Capable of being reached quickly for operation, renewal, or inspections without requiring those to whom ready access is requisite to climb over or remove obstacles or to resort to portable ladders, and so forth.

The phrase "the accessible portion of abandoned cables" is much vaguer than the definitions in the code, because the term "accessible portion" is not defined. Therefore, accessible portion is probably considered that length of cable that is within a few feet of the opening, and that can be cut off by reaching in. That is clearly not the intent of the code provision: the entire length of cable that can be pulled out should be removed.

Another possible interpretation is that this refers to excluding from removal those cables installed in the areas that CMP 16 calls "inaccessible ceiling cavity plenums and inaccessible raised floor plenums". The concept of those "inaccessible areas" was rejected by CMP 3 as inappropriate because there is no known fire safety problem with the present type of wiring methods, but it was approved by CMP 16. If this concept is approved, and the wording of "abandoned cables" includes the "accessible portion" concept, it would clearly mean that the NEC would permit some cables to be left permanently in place once abandoned. This was soundly rejected by the membership several times, in a concept upheld by Standards Council.

It is pretty obvious that the concept of removal of abandoned cable is not one where someone should try to tear down a building or cause structural damage to it just to remove cables "permanently closed in by the structure or finish of the building". I believe that we must trust in the intelligence of our code officials and electrical inspectors that they will not demand such actions. If there is a feeling that this is a possibility (which I cannot believe), it might be worth adding a Fine Print Note to the effect that removal of abandoned cables should not cause structural damage to the building. An example follows:

FPN: Removal of abandoned cables is not intended to cause structural damage to buildings.

Clearly, "the accessible portion of abandoned cables" is a misleading phrase which can lead to abundant misinterpretation. It should be eliminated in favor of the simpler "abandoned cables".

Panel Meeting Action: Reject

Panel Statement: See CMP 16 action and statement on Comment 16-310.

Number Eligible to Vote: 15

Ballot Results: Affirmative: 14 Negative: 1

Explanation of Negative:

OHDE: See my Explanation of Negative vote on Comment 16-654.

16-913 Log #197 NEC-P16 **Final Action: Reject**
(Tables 830-58 and 820-53)

Submitter: Stanley Kaufman, CableSafe, Inc.

Comment on Proposal No: 16-211

Recommendation: Accept this proposal in principle. Make the following additional changes to Tables 830.58 and 820.53:

In each line that contains "CMP" change "CMP" to "CMD, CMP".

Substantiation: Panel 16 action on Proposal 16-112 established Type CMD and permitted it to substitute for Type CMP.

Panel Meeting Action: Reject

Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:

"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."

This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.

Number Eligible to Vote: 15

Ballot Results: Affirmative: 13 Abstain: 2

Comment on Affirmative:

OHDE: See my Affirmative Comment on Comment 16-34.

Explanation of Abstention:

DORNA: See my Explanation of Abstention for Comment 16-34.

KAHN: See my Explanation of Abstention on Comment 16-34.

16-914 Log #278 NEC-P16 **Final Action: Accept**
(830.58)

Submitter: Technical Committee on Air Conditioning

Comment on Proposal No: 16-234

Recommendation: Continue to reject this proposal.

Substantiation: The Technical Committee on Air Conditioning agrees with the panel reject statement.

This comment is one in a series of comments including 16-12, 16-40, 16-60, 16-83, 16-115, 16-132, 16-138, 16-156, 16-180, 16-188, 16-195, 16-207, 16-209, 16-211, 16-228, 16-229, and 16-234.

Panel Meeting Action: Accept

Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:

"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."

This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.

Number Eligible to Vote: 15

Ballot Results: Affirmative: 13 Abstain: 2

Comment on Affirmative:

OHDE: See my Affirmative Comment on Comment 16-34.

Explanation of Abstention:

DORNA: See my Explanation of Abstention for Comment 16-34.

KAHN: See my Explanation of Abstention on Comment 16-34.

16-915 Log #3182 NEC-P16 **Final Action: Accept**
(830.58)

Submitter: Michael I. Callanan, IBEW

Comment on Proposal No: 16-234

Recommendation: Continue to reject.

Substantiation: I agree with the panel action to reject proposal 16-195. No technical substantiation has been provided that a change to the 2002 NEC language is needed or required. This comment represents the official position of the International Brotherhood of Electrical Workers Code and Standards Committee.

Panel Meeting Action: Accept

Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:

"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."

This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.

Number Eligible to Vote: 15

Ballot Results: Affirmative: 13 Abstain: 2

Comment on Affirmative:

OHDE: See my Affirmative Comment on Comment 16-34.

Explanation of Abstention:

DORNA: See my Explanation of Abstention for Comment 16-34.

KAHN: See my Explanation of Abstention on Comment 16-34.

16-916 Log #3730 NEC-P16 **Final Action: Accept**
(830.58)

Submitter: Marcelo M. Hirschler, GBH International / Rep. Fire Retardant Chemicals Association
Comment on Proposal No: 16-234
Recommendation: Continue rejecting this proposal and make no changes in the terminology of plenum spaces or of "other spaces used for environmental air".
Substantiation: The terminology in NEC 2002 is correct and needs no change. See also the substantiation for my comments on proposal 16-59.
Panel Meeting Action: Accept
Panel Statement: The panel is acting on this and other comments based on the Standards Council decision that is identified as Number 03-10-25 plus a subsequent letter by the Standards Council Chairman, Philip J. DiNenno to Mr. Loren Caudill, dated December 3, 2003. This decision states, in pertinent part as follows:
"The Council believes, that the best course of action for the NEC project is to generally refrain, unless absolutely necessary, from making revisions that interrelate with the NFPA 90A in advance of completion of the latest revision cycle of NFPA 90A, and instead to maintain the status quo in the NEC project on the applicable technical subjects pending completion of the NFPA 90A revision cycle."
This action does not constitute agreement or disagreement with any of the substantiations submitted for the affected comments.
Number Eligible to Vote: 15
Ballot Results: Affirmative: 13 Abstain: 2
Comment on Affirmative:
OHDE: See my Affirmative Comment on Comment 16-34.
Explanation of Abstention:
DORNA: See my Explanation of Abstention for Comment 16-34.
KAHN: See my Explanation of Abstention on Comment 16-34.

16-917 Log #2922 NEC-P16 **Final Action: Reject**
(830.59 (New))

Submitter: David H. Kendall, Carlon
Comment on Proposal No: 16-238
Recommendation: This proposal should review and reconsidered with the following text:
820.54 Network-Powered Broadband Communication Device and Equipment Mounting . Network-Powered Broadband Communication devices or equipment shall be mounted in listed boxes, brackets or assemblies designed for the purpose, and such boxes, brackets or assemblies shall be securely fastened in place.
Substantiation: Devices used with Network-Powered Broadband Communication cable should be mounted on other means than just the dry wall. Yes, there will be additional cost due to labor and material, but the boxes will supply the necessary fixed mounting for the device and cable. This is an individual opinion developed through conversations with BICSI, IBEW, IAEI and NECA members who have approached me with these concerns. UL has also developed listing requirements for these boxes and brackets.
The panel statement is evidence that it is acceptable to mount these devices directly to the dry wall without any other means of securing the device and needs to be reconsidered.
Panel Meeting Action: Reject
Panel Statement: The submitter has not substantiated that a safety hazard exists. The listing of equipment is already a requirement in 830.5, but the use of boxes is not always required.
Secure fastening is a workmanship issue and is covered in 830.3(C) and 830.7.
Number Eligible to Vote: 15
Ballot Results: Affirmative: 15

CHAPTER 9 — TABLES

8-202 Log #2039 NEC-P08 **Final Action: Accept**
(Chapter 9, Table (2) (new))

Submitter: Frederic P. Hartwell, Hartwell Electrical Services, Inc.
Comment on Proposal No: 8-24a
Recommendation: Continue to accept the proposal.
Substantiation: Tables within articles are generally appropriate only when their routine use is confined to that article. This is the case with the RNC expansion tables, which is why it made sense to bring them back from Chapter 9. The bend radius table for tubular metal raceways is routinely used by many code articles, and belongs in Chapter 9. CMP 8 may be interested to know that an attempt is being made to move the enclosure type table out of 430.91 and into Article 110. CMP 9 has objected (by formal comment), and part of the argument involved the desirability of a Chapter 9 location so it could be available to all articles.
Panel Meeting Action: Accept
Number Eligible to Vote: 13
Ballot Results: Affirmative: 13

8-203 Log #2048 NEC-P08 **Final Action: Accept**
(Chapter 9, Table (2) (new))

Submitter: Frederic P. Hartwell, Hartwell Electrical Services, Inc.
Comment on Proposal No: 8-61
Recommendation: Continue to accept the proposal.
Substantiation: Tables within articles are generally appropriate only when their routine use is confined to that article. This is the case with the RNC expansion tables, which is why it made sense to bring them back from Chapter 9. The bend radius table for tubular metal raceways is routinely used by many code articles, and belongs in Chapter 9. CMP 8 may be interested to know that an attempt is being made to move the enclosure type table out of 430.91 and into Article 110. CMP 9 has objected (by formal comment), and part of the argument involved the desirability of a Chapter 9 location so it could be available to all articles.
Panel Meeting Action: Accept
Number Eligible to Vote: 13
Ballot Results: Affirmative: 13

8-204 Log #2054 NEC-P08 **Final Action: Accept**
(Chapter 9, Table (2) (new))

Submitter: Frederic P. Hartwell, Hartwell Electrical Services, Inc.
Comment on Proposal No: 8-85
Recommendation: Continue to accept the proposal.
Substantiation: Tables within articles are generally appropriate only when their routine use is confined to that article. This is the case with the RNC expansion tables, which is why it made sense to bring them back from Chapter 9. The bend radius table for tubular metal raceways is routinely used by many code articles, and belongs in Chapter 9. CMP 8 may be interested to know that an attempt is being made to move the enclosure type table out of 430.91 and into Article 110. CMP 9 has objected (by formal comment), and part of the argument involved the desirability of a Chapter 9 location so it could be available to all articles.
Panel Meeting Action: Accept
Number Eligible to Vote: 13
Ballot Results: Affirmative: 13

8-205 Log #2064 NEC-P08 **Final Action: Accept**
(Chapter 9, Table (2) (new))

Submitter: Frederic P. Hartwell, Hartwell Electrical Services, Inc.
Comment on Proposal No: 8-127
Recommendation: Continue to accept the proposal.
Substantiation: Tables within articles are generally appropriate only when their routine use is confined to that article. This is the case with the RNC expansion tables, which is why it made sense to bring them back from Chapter 9. The bend radius table for tubular metal raceways is routinely used by many code articles, and belongs in Chapter 9. CMP 8 may be interested to know that an attempt is being made to move the enclosure type table out of 430.91 and into Article 110. CMP 9 has objected (by formal comment), and part of the argument involved the desirability of a Chapter 9 location so it could be available to all articles.
Panel Meeting Action: Accept
Number Eligible to Vote: 13
Ballot Results: Affirmative: 13

8-206 Log #2068 NEC-P08 **Final Action: Accept**
(Chapter 9,. Table (2) (new))

Submitter: Frederic P. Hartwell, Hartwell Electrical Services, Inc.
Comment on Proposal No: 8-157
Recommendation: Continue to accept the proposal.
Substantiation: Tables within articles are generally appropriate only when their routine use is confined to that article. This is the case with the RNC expansion tables, which is why it made sense to bring them back from Chapter 9. The bend radius table for tubular metal raceways is routinely used by many code articles, and belongs in Chapter 9. CMP 8 may be interested to know that an attempt is being made to move the enclosure type table out of 430.91 and into Article 110. CMP 9 has objected (by formal comment), and part of the argument involved the desirability of a Chapter 9 location so it could be available to all articles.
Panel Meeting Action: Accept
Number Eligible to Vote: 13
Ballot Results: Affirmative: 13

3-805 Log #1821 NEC-P03 **Final Action: Accept**
(Chapter 9, Table 12 (B))

Submitter: Thomas P. Hammerberg, Automatic Fire Alarm Association
Comment on Proposal No: 3-300
Recommendation: Continue to accept in principle.
Substantiation: The panel action meets the submitter's intent.
Panel Meeting Action: Accept
Number Eligible to Vote: 13
Ballot Results: Affirmative: 13

ANNEX A

18-124 Log #3657 NEC-P18 **Final Action: Accept**
(Annex A)

Submitter: Marcelo M. Hirschler, GBH International
Comment on Proposal No: 3-120
Recommendation: Add reference to the two following product standards:
Seasonal and Holiday Decorative Products: UL 588
Substantiation: The language shown below was accepted for addition to a new section 527.5 by CMP 3, while accepting the proposal in part.
527.5 (New) Decorative lighting used for holiday lighting and similar purposes, in accordance with 527.3(B) shall be listed.
In order to be consistent with the inclusion of other product standards used for listing electrical products, UL 588, which is the standard used for listing this type of temporary decorative lights, should be added to Annex A. The TCC requested that a title be given to the section, and a comment to that effect will be made, as follows:
527.5 Decorative Lighting (New) Decorative lighting used for holiday lighting and similar purposes, in accordance with 527.3(B) shall be listed.
Panel Meeting Action: Accept
Number Eligible to Vote: 10
Ballot Results: Affirmative: 10

18-124a Log #3660 NEC-P18 **Final Action: Accept**
(Annex A)

Submitter: Marcelo M. Hirschler, GBH International
Comment on Proposal No: 18-50
Recommendation: Add reference to the two following product standards:
Seasonal and Holiday Decorative Products: UL 588
Flexible Lighting Products: UL 2388
Substantiation: The language shown below is being proposed for addition to article 410. In order to be consistent with the inclusion of other product standards used for listing electrical products, UL 588 and UL 2388, which are the standards used for listing two types of luminaires, should be added to Annex A.
410.1 Scope.
This article covers luminaires (lighting fixtures), lampholders, pendants, incandescent filament lamps, arc lamps, electric-discharge lamps, the wiring and equipment forming part of such lamps, luminaires (fixtures), and lighting installations.
FPN: With regard to the applicability of this article, luminaires include decorative lighting products and accessories for temporary seasonal and holiday use, and portable flexible lighting products.
Proposal 18-50 was accepted in principle by the technical committee (CMP 18) but rejected by the Technical Correlating Committee because it is the responsibility of CMP 1 to address definitions. The proposed change made in the Comment to Code-Making Panel 18 will not cause CMP-18 to overlap with the responsibilities of CMP 1, while still making it clear to the users of the NEC that decorative lighting products and accessories for temporary seasonal and holiday use, and portable flexible lighting products are covered by this article.
Panel Meeting Action: Accept
Number Eligible to Vote: 10
Ballot Results: Affirmative: 10

18-125 Log #3846 NEC-P18 **Final Action: Accept**
(Annex A)

Submitter: Marcelo M. Hirschler, GBH International / Rep. Fire Retardant Chemicals Association
Comment on Proposal No: 3-120
Recommendation: *Add reference to the two following product standard:*
Seasonal and Holiday Decorative Products: UL 588.
Substantiation: The language shown below was accepted for addition to a new section 527.5 by CMP 3, while accepting the proposal in part..
527.5 (New) Decorative lighting used for holiday lighting and similar purposes, in accordance with 527.3(B) shall be listed.
In order to be consistent with the inclusion of other product standards used for listing electrical products, UL 588, which is the standard used for listing this type of temporary decorative lights, should be added to Annex A. The TCC requested that a title be given to the section, and a comment to that effect will be made, as follows:
527.5 Decorative Lighting (New) Decorative lighting used for holiday lighting and similar purposes, in accordance with 527.3(B) shall be listed.
Panel Meeting Action: Accept
Number Eligible to Vote: 10
Ballot Results: Affirmative: 10

18-126 Log #3849 NEC-P18 **Final Action: Accept**
(Annex A)

Submitter: Marcelo M. Hirschler, GBH International / Rep. Fire Retardant Chemicals Association
Comment on Proposal No: 18-50
Recommendation: *Add reference to the two following product standards:*
Seasonal and Holiday Decorative Products: UL 588
Flexible Lighting Products: UL 2388.
Substantiation: The language shown below is being proposed for addition to article 410. In order to be consistent with the inclusion of other product standards used for listing electrical products, UL 588 and UL 2388, which are the standards used for listing two types of luminaires, should be added to Annex A.
410.1 Scope. This article covers luminaires (lighting fixtures), lampholders, pendants, incandescent filament lamps, arc lamps, electric-discharge lamps, the wiring and equipment forming part of such lamps, luminaires (fixtures), and lighting installations.
FPN: With regard to the applicability of this article, luminaires include decorative lighting products and accessories for temporary seasonal and holiday use, and portable flexible lighting products.
_Proposal 18-50 was accepted in principle by the technical committee (CMP 18) but rejected by the Technical Correlating Committee because it is the responsibility of CMP 1 to address definitions. The proposed change made in the comment to panel 18 will not cause CMP 18 to overlap with the responsibilities of CMP 1, while still making it clear to the users of the NEC that decorative lighting products and accessories for temporary seasonal and holiday use, and portable flexible lighting products are covered by this article.
Panel Meeting Action: Accept
Number Eligible to Vote: 10
Ballot Results: Affirmative: 10

1-256 Log #1401 NEC-P01 **Final Action: Accept in Principle**
(Annex A)

Note: The Technical Correlating Committee directs that UL 1459 remain in the Annex to correlate with Article 800.
Submitter: Sonya M. Bird, Underwriters Laboratories Inc.
Comment on Proposal No: 13-156a
Recommendation: Both of these proposals, 13-156a and 11-114, are intended to update Annex A listing applicable product safety standards. Additional changes are needed in order to further update the Annex A. Annex A incorporates the changes made under this comment, as well as those changes originally proposed in 13-156a and 11-114. Specifically, this comment is made to:
(1) Update the following standard titles and designations:
a. Audio/Video and Musical Instrument Apparatus for Household, Commercial and Similar General Use (UL 60065) - update standards designation.
b. Busways (UL 857) - update standard title.
c. Continuous Length HDPE Conduit (UL 651B) - update standard title.
d. Electrical Apparatus for Explosive Gas Atmospheres (UL 60079 series) - replace former reference to UL 2279 standard with the reference to the UL 60079 standards, as these standards replaced UL 2279.
e. Electrical Metallic Tubing - Steel (UL 797) - update standard title.
f. Luninaires (UL 1598) and Luminaire Reflector Kits for Installation on Perviously Installed Fluorescent Luminaires, Supplemental Requirements (UL 1598B) - replace former references to UL 1570, UL 1571 and UL 1572 with these standards as the previous UL standards have been rewritten and redesignated.
g. Intermediate Metal Conduit - Steel (UL 1242) - update standard title.
h. Junction Boxes for Swimming Pool Luminaires (UL 1241) - update standard title.
i. Personnel Protection Systems for Electrical Vehicle Supply Circuits: General Requirements (UL 2232-1) - update standard title.
j. Personnel Protection Systems for Electric Vehicle Supply Circuits: Particular Requirements for Protection Devices for Use in Charging Systems (UL 2231-2) - update title.
k. Portable Electric Luminaires (UL 153) - update standard title.
l. Rigid Metal Conduit - Steel (UL 6) - update standard title.
m. Safety of Information Technology Equipment, Part 1: General Requirements (UL 60950-1) - update standard title and designation.
n. Smoke Detectors for Fire Alarm Signaling Systems (UL 268) - update standard title.
o. Inverts, Converters, and Controllers for Use in Independent Power Systems (UL 1741) - update standard title.

p. Underwater Luminaires and Submersible Junction Boxes (UL 676) - update standard title.

(2) Add reference to the following UL standards because the NEC specifically requires the use of Listed equipment for these products, or the NEC requires that these products be identified for the specific purpose, and these product standards are one such means for such identification: Class 2 and Class 3 Transformers (UL 1585), Electrical Metallic Tubing - Aluminum (UL 797A), Electrical Heating Appliances (UL 499), Electric Vehicle (EV) Charging System Equipment (UL 2202), Gas-Burning Heating Appliances for Manufactured Homes and Recreational Vehicles (UL 307B), Gas-Fired Cooking Appliances for Recreational Vehicles (UL 1075), Household Refrigerators and Freezers (UL 250), Liquid Fuel-Burning Heating Appliances for Manufactured Homes and Recreational Vehicles (UL 307A), Low-Voltage Fuses - Part 13: Semiconductor Fuses (UL 248-13), Low-Voltage Fuses Part 14 - Supplemental Fuses (UL248-14), Low-Voltage Fuses - Part 16: Test Limiters (UL 248-16), Low-Voltage Lighting Fixtures for Use in Recreational Vehicles (UL 234), Medical Electrical Equipment, Part 1: General Requirements (UL 60601-1), Plugs, Receptacles and Couplers for Electric Vehicles (UL 2251), Uninterruptible Power Systems (UL 1778), Waste Disposers (UL 430).

(3) Delete reference to the following UL standards as they have been withdrawn and superseded by other referenced UL standards: Molded Case Switches (UL 1087), Radio Receivers, Audio Systems, and Accessories (UL 1270). Telephone Equipment (UL 1459).

Substantiation: Additional changes are needed in order for this annex to reflect the most recent product standard designations and names for those UL standards that are currently referenced. Additionally, changes to the Annex are needed in order to reflect the product listing requirements of the NEC, and to reflect those standards that are suitable for evaluating products and identifying them for a particular purpose within the NEC. Listing to these specific product safety standards is one mechanism for meeting the requirement that a product be identified for a particular purpose.

Panel Meeting Action: Accept in Principle

Panel Statement: In addition to the recommendation CMP-1 adds UL 544 Medical and Dental equipment under item 3 as a deleted reference. Accept the proposed additions and revisions included in the recommendations only. Do not include the statements of proposed actions included in the text of the recommendation. Correct spelling of "luminaires" and "previously" in item F. Correct spelling of "inverters" in item O.

Number Eligible to Vote: 12

Ballot Results: Affirmative: 12

Comment on Affirmative:

TROGLIA: Edison Electric Institute accepts the Panel's action on this comment, but believes that the proposed additions and revisions should include only those items that are a part of premises wiring. Standards need not be included for such items as appliances that are typically cord-and-plug connected devices. It is the Edison Electric Institute's position that the requirements for end-use electrical devices that are not installed as part of the permanent premises wiring system are best covered by appropriate product standards. It is not the National Electrical Code's intent or scope to set requirements for end-use electrical devices that would typically be purchased by the after market consumer.

The Edison Electric Institute supports the entire electrical safety system that integrates product standards, installation standards, product testing and evaluation, electrical inspection, manufacturer's products, qualified electrical installation and maintenance, electric supply system characteristics, and the owner's use and operation. Covering product standards in the National Electrical Code installation standard could negate the responsibility of the appropriate product standard and adversely impact the entire process.

The integrity of the electrical safety system is anchored in the systematic integration of the National Electrical Code, installation inspection, product safety standards and product testing. If non-premises end-use product safety issues are usurped by the National Electrical Code, the product safety standard process will be weakened resulting in the entire process being weakened.

1-258 Log #648 NEC-P01 **Final Action: Accept**
(Annex A)

Submitter: Technical Correlating Committee on National Electrical Code®
Comment on Proposal No: 13-156a
Recommendation: It was the action of the Technical Correlating Committee that this Proposal be referred to Code-Making Panel 1 for action. This action will be considered by Code-Making Panel 1 as a public comment.
Substantiation: This is a direction from the National Electrical Code Technical Correlating Committee in accordance with 3-4.2 and 3-4.3 of the Regulations Governing Committee Projects.
Panel Meeting Action: Accept
Panel Statement: CMP-1 adds UL 924, Emergency Lighting and Power Equipment; UL 1703, Flat-Plate Photovoltaic Modules and Panels; and UL 2200, Stationary Engine Generator Assemblies to Annex A.
Number Eligible to Vote: 12
Ballot Results: Affirmative: 12

ANNEX C

8-207 Log #707 NEC-P08 **Final Action: Accept in Principle**
(Tables C-1, C4 and C8)

Submitter: David Sroka Turner Falls, MA
Comment on Proposal No: 8-297
Recommendation: Add a Note No. 2 to Tables C1, C4 and C8 to read as follows:

"Two hour fire rated RHH cable has ceramifiable insulation which has much larger diameters than other RHH wires. Consult manufacturer's conduit fill tables."

Substantiation: 1. Misuse of the normal (smaller diameter) RHH wire tables can be avoided.

2. Use of rigid metal conduit seems preferable for greater surviveability.

Panel Meeting Action: Accept in Principle

Add a Note No. 2 to Tables C1, C2, C3, C4, C5, C6 ,C7, C8, C9, C10, C11 and C12 to read as follows:

"Two-hour fire-rated RHH cable has ceramifiable insulation which has much larger diameters than other RHH wires. Consult manufacturer's conduit fill tables."

Panel Statement: Two-hour fire-rated RHH cables may be installed in all types of raceways. Therefore, the panel inserted a new Note 2 for all of the Tables.

Number Eligible to Vote: 13

Ballot Results: Affirmative: 13

8-208 Log #3267 NEC-P08 **Final Action: Accept**
(Annex C, Tables C1(A) throuth C12(A))

Submitter: Larry G. Watkins, Alcan Cable
Comment on Proposal No: 8-296
Recommendation: Accept inclusion of 900 kcmil conductors in Compact Conductor Conduit Fill Tables.
Substantiation: Panel 6 accepted the dimensions for r900 kcmil compact conductors provided from the industry. The calculations were performed as described in Chapter 9 NEC for conduit fill.

Note: Supporting material is available for review at NFPA Headquarters.

Panel Meeting Action: Accept
Number Eligible to Vote: 13
Ballot Results: Affirmative: 13

ANNEX D

2-183 Log #2218 NEC-P02 **Final Action: Accept**
(Annex D, Example D3A (new))

Submitter: Frederic P. Hartwell, Hartwell Electrical Services, Inc.
Comment on Proposal No: 2-367
Recommendation: The proposal should be accepted in principle. Adjust the loads to remove rounding discrepancies, as follows:

1. In the load profile, lower the receptacle count from 25 to 22, and increase the lighting load from 11,400 VA to 11,600 VA.
2. Change the receptacle load calculation to read: 22 receptacles at 180 VA 3,960 VA
3. Change the subtotal for noncontinuous loads to: 28,500 VA
4. Change the "subtotal for load calculations, noncontinuous loads" to: 42,400 VA
5. Under continuous loads, change the General Lighting load to: 11,600 VA
6. Change the subtotal for continuous loads to: 56,600 VA
7. Change the continuous load in the summation to: 56,600 VA
8. Change the noncontinuous load in the summation to: 42,400 VA
9. Change the subtotal in the summation to: 99,000 VA

10. Change the summation ampere calculation to: 99,000 VA ÷ (480V X √3) = 119 A

11. Change the 25% adder line to begin: 14,200 VA (25% of 56,600 VA)

12. Change the result before ampere conversion to: 113,200 VA

13. Change the first line of the raceway calculation to: 99,000 VA ÷ 0.7 ÷ 0.96 = 147,000 VA

14. Change the ampere conversion result for the raceway calculation to: 177A

15. Change the opening VA entry in the raceway narrative from 99,300 VA to 99,000 VA

16. Change the neutral load calculation to: "11,600. VA (11,600 VA ÷ 277V = 42 amperes.)"

17. Change the neutral size calculation to: "1.25 X (11,600 VA ÷ 277V) = 52 amperes"

18. Correct the Article 250 reference for fault current return to "250.32(B)(2)(2)."

19. Edit the note on calculated loads following the load profile and problem statement to read as follows:

"{Note: For reasonable precision, volt-ampere calculations are carried to three significant figures only; where loads are converted to amperes, the results are rounded to the nearest ampere [see 220.2(B)]}."

20. At the end of the neutral calculation, add the following sentence: "This size is also the minimum size required by 215.2(A)(1), because the minimum size equipment grounding conductor for a 150 ampere circuit, as covered in Table 250.122, is 6 AWG."

Substantiation: This comment, although not formally balloted, has been endorsed by all members of the subtask group of the Usability Task Group on Article 220 (Michael I. Callanan, Chair) that was responsible for the development of this example. The membership of this group was Frederic P. Hartwell, Lanny G. McMahill, James G. Stallcup, and Robert G. Wilkinson.

The submitter served as chair of this group. In writing a detailed analysis of the new example for IAEI News, it became clear that the educational value of the example would be enhanced if the load profile were slightly adjusted to eliminate rounding problems that can only provoke pointless controversy. Using the originally submitted numbers, the feeder ampacity for the conductors in the common raceway before the use of adjustment factors comes out the sum of 51.6A (noncontinuous) + 67.8A (continuous). These numbers produce two different results depending on when they are rounded to the nearest ampere [per 220.2(B)].

If rounded before the summation, the result is 52A + 68A = 120A; if rounded after the summation, the result is 51.6A + 67.8A = 119.4A, which then rounds to 119A. Normally, this ampere wouldn't matter, but in this case when these values are adjusted for multiple conductors (by dividing by 0.7) in the common raceway, the resulting required ampacity varies between 170A and 171A. Since the table ampacity of 1/0 XHHW-2 is 170A, the rounding difference changes a wire size. The example is much stronger and more valuable as a teaching tool when it can be used to demonstrate, in this case, that adjusting for multiple conductors requires a 1/0, but when you add a higher-temperature ambient as well you now need to go to 2/0. If this comment is not accepted, the required conductor size in either case is arguably 2/0, weakening the teaching value of the example. The load tweaks in this comment result in complete consistency of results regardless of when a code user converts from volt-amperes to amperes and regardless of which ampacity adjustment an instructor wants to focus on. The initial summation is 51.0A (noncontinuous) + 68.1A (continuous), which adds to 119A no matter how the rounding is done.

The eighteenth change is to correct a typo in the original submittal. The intended reference for fault return capability of a grounded circuit conductor is 250.32(B)(2)(2). The submitter apologizes for the error in the original proposal. The next change is to edit the calculation procedure note to use the correct word "precision" and to clarify that the three significant figure aspect only applies to the volt-ampere calculations. The final change is to correlate this example with the action on Proposal 2-270. It does not change the calculated result.

Panel Meeting Action: Accept
Number Eligible to Vote: 13
Ballot Results: Affirmative: 13