NFPA 804, Standard for Fire Protection for Advanced Light Water Reactor Electric Generating Plants,

NFPA 805, Performance-Based Standard for Fire Protection for Light Water Reactor Electric Generating Plants, and

NFPA 806, Performance-Based Standard for Fire Protection for Advanced Nuclear Reactor Electric Generating Plants

FIF-AAA (F2014) Second Draft Meeting
Web/Teleconference Meeting Agenda
March 18, 2014
1:00—5:00 p.m. ET

1.0 Meeting Opening, member and guest welcome – introduction

2.0 Chair remarks

3.0 Review and approve minutes from last meeting

4.0 Staff Liaison update (new process, committee update)

5.0 Public comment - review and action

6.0 Committee comment – develop and action as required

7.0 Other business

8.0 Next Meeting - TBD
# FIF-AAA
## Technical Committee on Fire Protection for Nuclear Facilities
### First Draft Meeting for NFPA 804/805/806
#### Thursday, April 25th
##### 8 AM - 2 PM ET

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<td>William Till (chair)</td>
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<td>Eric Johnson</td>
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<td>James Bisker</td>
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<td>Ivan Bollinger</td>
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<tr>
<td>Stanford Davis</td>
<td>Yes-phone</td>
<td>Frank Gruscavage</td>
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<tr>
<td>Richard Dible</td>
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<tr>
<td>Edgar Dressler</td>
<td></td>
<td>Seth Breitmaler</td>
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<td>David Estrella</td>
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<td>Daniel Hubert</td>
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<td>Paul Ouellette</td>
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<td>John Gaertner</td>
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<td>Elizabeth Kleinsorg</td>
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<td>Andrew Ratchford</td>
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<td>Neal Krantz</td>
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<td>A.M. Fred Leber</td>
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<td>Christopher Ksobiech</td>
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<td>Jeffery Ertman</td>
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<td>Daniel Frumkin</td>
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<td>John Lattner</td>
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<td>Charles March</td>
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<td>Anca McGee</td>
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<td>James Bouche</td>
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<td>Bijan Najafi</td>
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<td>Clifford Sinopoli</td>
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<td>James Streit</td>
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<td>Donald Struck</td>
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<td>Daniel Finnegan</td>
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<td>William Sullivan</td>
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<td>Leonard Hathaway</td>
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<td>Walter W. Maybee</td>
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<td>Susan Bershad –</td>
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<td>staff liaison</td>
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1.0 Meeting was called to order at 8 AM by the chair, Bernie Till
2.0 Meeting and web conference attendees were self-introduced and their attendance recorded
   (see above for attendance list)
3.0 Minutes of the last meeting (March 27-28, 2012) were approved as written
4.0 NFPA staff liaison, Susan Bershad, gave updates of committee membership, newly
   appointed members, and the hold list
5.0 Guy Colonna from the NFPA gave an update on the new NFPA process
6.0 The committee review and took action on the public input for NFPA 804, 805, and 806
7.0 Several of the public input received for 804 are applicable to 805 and 806. A motion was
   made and approved to have the staff liaison make first revisions to 805 and 806 as
   appropriate to be consistent with the first revisions for 804.
8.0 A motion was made and approved for the staff liaison to update all document references to
   current revisions as appropriate for the first draft.
9.0 The committee discussed the NITMAM pending for NFPA 801. The chair has discussed the
   issue with the submitter of the NITMAM. The committee agreed with the position that
   NFPA 45 applies to laboratories and that NFPA 801 applies to radiological operations within
   laboratories. The definition of a fume hood in 801 versus a laboratory hood in 45 needs to
   be clarified. The chair is going to go back to the submitter with feedback from the TC
   discuss the next step. If the submitter agrees to withdraw the NITMAM, the TC could
   process a TIA to address the issues of concern. If the NITMAM is not withdrawn and it goes
   to the NFPA annual meeting, the chair will set up a conference call with the TC to discuss the
   committee’s position.
10.0 The next meeting of the Technical Committee will be March 18th and 19th in Dallas, TX.
    This will be the second draft meeting for the document.
11.0 The meeting was adjourned at 2:00 PM ET.
### 2.2 NFPA Publications.

National Fire Protection Association, 1 Batterymarch Park, Quincy, MA 02169-7471.


Statement of Problem and Substantiation for Public Input

NFPA 251 has been withdrawn and replaced by ASTM E119

Submitter Information Verification

Submitter Full Name: Marcelo Hirschler
Organization: GBH International
Submittal Date: Thu Jan 03 19:29:10 EST 2013
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2.3.3 ASTM Publications.
ASTM International, 100 Barr Harbor Drive, P. O. Box C700, West Conshohocken, PA 19428-2959.

Statement of Problem and Substantiation for Public Input
standards date updates

Submitter Information Verification

Submitter Full Name: Marcelo Hirschler
Organization: GBH International
Submittal Date: Thu Jan 03 18:46:51 EST 2013

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Public Input No. 7-NFPA 804-2013 [Section No. 3.3.17]

3.3.17* Fire-Rated Cables.

Also, add UL 2196-2002 into chapter 2 on referenced UL standards.

Statement of Problem and Substantiation for Public Input

NFPA 251 has been withdrawn. Fire-rated cables (or circuit integrity cables) are cables that have been tested and meet the requirements of UL 2196.

Related Public Inputs for This Document

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Submitter Information Verification

Submitter Full Name: Marcelo Hirschler
Organization: GBH International
Submittal Date: Thu Jan 03 19:39:16 EST 2013

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3.3.20 Fire Resistance Rating.
The time, in minutes or hours, that materials or assemblies have withstood a fire exposure as established in accordance with the test procedures of NFPA 251. [220, 2009] determined by the tests, or methods based on tests, prescribed by this standard. [NFPA 101]


Statement of Problem and Substantiation for Public Input
NFPA 251 has been withdrawn and replaced by ASTM E119

Related Public Inputs for This Document

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Submitter Full Name: Marcelo Hirschler
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3.3.24 Flame Spread Rating Index

A relative measurement of the surface burning characteristics of building materials when:

A comparative measure, expressed as a dimensionless number, derived from visual measurements of the spread of flame versus time for a material tested in accordance with ASTM E 84, Standard Test Method for Surface Burning Characteristics of Building Materials, or ANSI/UL 723, Standard for Test for Surface Burning Characteristics of Building Materials, [NFPA 101-2012; 3.3.147.1]

Statement of Problem and Substantiation for Public Input

The term flame spread rating is no longer used and has been replaced by the term flame spread index. The definition of flame spread index is being extracted from NFPA 101-2012.

Submitter Information Verification

Submitter Full Name: Marcelo Hirschler
Organization: GBH International
Submittal Date: Thu Jan 03 18:51:29 EST 2013

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3.3.30 Limited-Combustible Material—

Refers to a building construction material not complying with the definition of noncombustible that

(see 4.9.1) [NFPA 101; 3.3.169.2]

4.9 Materials

4.9.1 Limited-Combustible Material. A material shall be considered a limited-combustible material where all the conditions of 4.9.1.1 and 4.9.1.2, and the conditions of either 4.9.1.3 or 4.9.1.4, are met. [NFPA 101, 4.6.14]

4.9.1.1 The material shall not comply with the requirements for noncombustible material in accordance with 4.9.2. [NFPA 101; 4.6.14.1]

4.9.1.2 The material, in the form in which it is used,

shall exhibit a potential heat value not exceeding 3500 Btu/lb (8141 kJ/kg)

where tested in accordance with NFPA 259,

and includes either (1) materials having a


4.9.1.3 The material shall have the structural base of a noncombustible material

with a surfacing not exceeding a thickness of 1/8 in. (3.2 mm)

where the surfacing exhibits a flame spread index not greater than 50 when tested in accordance with ASTM E 84,

or (2) materials


4.9.1.4 The material shall be composed of materials that, in the form and thickness used

having

neither exhibit a flame spread index greater than 25 nor evidence of

continued progressive combustion when tested in accordance with ASTM E 84,

Standard Test Method for Surface Burning Characteristics of Building Materials, or ANSI/UL 723, Standard for Test for Surface Burning Characteristics of Building Materials, and shall be of such composition that all surfaces that would be exposed by cutting through the material on any plane would

have

neither exhibit a flame spread index greater than 25 nor exhibit evidence of

continued progressive combustion.
when tested in accordance with ASTM E 84 or ANSI/UL 723. [NFPA 220, 2009 NFPA 101: 4.6.14.4]

4.9.1.5 Where the term limited-combustible is used in this Code, it shall also include the term noncombustible. [NFPA 101: 4.6.14.5]

A.4.9.1 Materials subject to increase in combustibility or flame spread index beyond the limits herein established through the effects of age, moisture, or other atmospheric condition are considered combustible. (See NFPA 259, Standard Test Method for Potential Heat of Building Materials, and NFPA 220, Standard on Types of Building Construction.) [NFPA 101, A.4.6.14]

Statement of Problem and Substantiation for Public Input

NFPA 101, NFPA 5000, NFPA 220 and other NFPA documents have adopted the concept of including simply a reference to a section in the body of the document for the definitions of limited combustible and non combustible. The definitions and new sections are extracted from NFPA 101.

Submitter Information Verification

Submitter Full Name: Marcelo Hirschler
Organization: GBH International
Submittal Date: Thu Jan 03 18:57:58 EST 2013

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3.3.31 Noncombustible
Not capable of igniting and burning when subjected to a fire. (material). (see 4.9.2) [NFPA 101; 3.3.169.4]

4.9 Materials

4.9.2* Noncombustible Material. [NFPA 101; 4.6.13]

4.9.2.1 A material that complies with any of the following shall be considered a noncombustible material:

(1)*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

(2) A material that is reported as passing ASTM E 136, Standard Test Method for Behavior of Materials in a Vertical Tube Furnace at 750 Degrees C

(3) A material that is reported as complying with the pass/fail criteria of ASTM E 136 when tested in accordance with the test method and procedure in ASTM E 2652, Standard Test Method for Behavior of Materials in a Tube Furnace with a Cone-shaped Airflow Stabilizer, at 750 Degrees C [NFPA 101; 4.6.13.1]

4.9.2.2 Where the term limited-combustible is used in this document, it shall also include the term noncombustible. [NFPA 101; 4.6.13.2]

A.4.9.2.1The provisions of 4.9.2 do not require inherently noncombustible materials to be tested in order to be classified as noncombustible materials. [NFPA 101; A.4.6.13.2.1]

A.4.9.2.1(1) Examples of such materials include steel, concrete, masonry, and glass. [NFPA 101; A.4.6.13.2.1.(1)]

Also: add ASTM E2652, Standard Test Method for Behavior of Materials in a Tube Furnace with a Cone-shaped Airflow Stabilizer, at 750 Degrees C, 2012, to section 2.3.3 on referenced ASTM standards

Statement of Problem and Substantiation for Public Input
See public input on limited combustible material

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Submitter Information Verification
Submitter Full Name: Marcelo Hirschler
Organization: GBH International
Submittal Date: Thu Jan 03 19:09:35 EST 2013

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A.3.3.17 Fire-Rated Cables.

At this time, there is no nationally recognized standard to test and qualify fire-rated cables. The cables should be tested in accordance with the time-temperature curve in NFPA 251, *Standard Methods of Tests of Fire Resistance of Building Construction and Materials*. The National Electrical Code recognizes circuit integrity cables, as cables that have been tested to UL 2196. Articles 725, 760, 770 and 800 recognize such cables. The cables should remain functional, operational, for the required period of the rating period.

Also, add UL 2196 to the annex on referenced standards.

Statement of Problem and Substantiation for Public Input

The NEC does recognize fire rated cables and circuit integrity cables

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Submitter Information Verification

Submitter Full Name: Marcelo Hirschler
Organization: GBH International
Submittal Date: Thu Jan 03 19:43:07 EST 2013

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Public Input No. 2-NFPA 805-2012 [ Section No. 2.3.4 ]

2.3.4 UL Publications.
Underwriters Laboratories Inc., 333 Pfingsten Road, Northbrook IL 60062-2096.


Statement of Problem and Substantiation for Public Input
Update referenced standard to most recent edition as indicated.

Submitter Information Verification

Submitter Full Name: John Bender
Organization: UL LLC
Submittal Date: Fri Dec 28 09:01:49 EST 2012

Copyright Assignment

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Public Input No. 3-NFPA 805-2012 [ Section No. F.1.2.9 ]

F.1.2.9 UL Publications.

Underwriters Laboratories Inc., 333 Pfingsten Road, Northbrook, IL 60062-2096.


Statement of Problem and Substantiation for Public Input

Update referenced standard to most recent edition as indicated.

Submitter Information Verification

Submitter Full Name: John Bender
Organization: UL LLC
Submittal Date: Fri Dec 28 09:02:45 EST 2012

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2.3.4 UL Publications.
Underwriters Laboratories Inc., 333 Pfingsten Road, Northbrook, IL 60062-2096.

Statement of Problem and Substantiation for Public Input

Update referenced standard to most recent edition as indicated.

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Submitter Full Name: John Bender
Organization: UL LLC
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