

2010 Annual Revision Cycle

Report on Proposals

A compilation of NFPA® Technical Committee Reports on Proposals for public review and comment

Public Comment Deadline: September 4, 2009

NOTE: The proposed NFPA documents addressed in this Report on Proposals (ROP) and in a follow-up Report on Comments (ROC) will only be presented for action when proper Amending Motions have been submitted to the NFPA by the deadline of April 9, 2010. The June 2010 NFPA Conference & Expo will be held June 7–10, 2010 at the Mandalay Bay Convention Center, Las Vegas, NV. During the meeting, the Association Technical Meeting (Tech Session) will be held June 9–10, 2010. Documents that receive no motions will not be presented at the meeting and instead will be forwarded directly to the Standards Council for action on issuance. For more information on the rules and for up-to-date information on schedules and deadlines for processing NFPA documents, check the NFPA website (www.nfpa.org) or contact NFPA Standards Administration.



National Fire Protection Association®

1 BATTERYMARCH PARK, QUINCY, MA 02169-7471

Information on NFPA Codes and Standards Development

I. Applicable Regulations. The primary rules governing the processing of NFPA documents (codes, standards, recommended practices, and guides) are the *NFPA Regulations Governing Committee Projects (Regs)*. Other applicable rules include *NFPA Bylaws*, *NFPA Technical Meeting Convention Rules*, *NFPA Guide for the Conduct of Participants in the NFPA Standards Development Process*, and the *NFPA Regulations Governing Petitions to the Board of Directors from Decisions of the Standards Council*. Most of these rules and regulations are contained in the *NFPA Directory*. For copies of the *Directory*, contact Codes and Standards Administration at NFPA Headquarters; all these documents are also available on the NFPA website at “www.nfpa.org.”

The following is general information on the NFPA process. All participants, however, should refer to the actual rules and regulations for a full understanding of this process and for the criteria that govern participation.

II. Technical Committee Report. The Technical Committee Report is defined as “the Report of the Technical Committee and Technical Correlating Committee (if any) on a document. A Technical Committee Report consists of the Report on Proposals (ROP), as modified by the Report on Comments (ROC), published by the Association.”

III. Step 1: Report on Proposals (ROP). The ROP is defined as “a report to the Association on the actions taken by Technical Committees and/or Technical Correlating Committees, accompanied by a ballot statement and one or more proposals on text for a new document or to amend an existing document.” Any objection to an action in the ROP must be raised through the filing of an appropriate Comment for consideration in the ROC or the objection will be considered resolved.

IV. Step 2: Report on Comments (ROC). The ROC is defined as “a report to the Association on the actions taken by Technical Committees and/or Technical Correlating Committees accompanied by a ballot statement and one or more comments resulting from public review of the Report on Proposals (ROP).” The ROP and the ROC together constitute the Technical Committee Report. Any outstanding objection following the ROC must be raised through an appropriate Amending Motion at the Association Technical Meeting or the objection will be considered resolved.

V. Step 3a: Action at Association Technical Meeting. Following the publication of the ROC, there is a period during which those wishing to make proper Amending Motions on the Technical Committee Reports must signal their intention by submitting a Notice of Intent to Make a Motion. Documents that receive notice of proper Amending Motions (Certified Amending Motions) will be presented for action at the annual June Association Technical Meeting. At the meeting, the NFPA membership can consider and act on these Certified Amending Motions as well as Follow-up Amending Motions, that is, motions that become necessary as a result of a previous successful Amending Motion. (See 4.6.2 through 4.6.9 of *Regs* for a summary of the available Amending Motions and who may make them.) Any outstanding objection following action at an Association Technical Meeting (and any further Technical Committee consideration following successful Amending Motions, see *Regs* at 4.7) must be raised through an appeal to the Standards Council or it will be considered to be resolved.

VI. Step 3b: Documents Forwarded Directly to the Council. Where no Notice of Intent to Make a Motion (NITMAM) is received and certified in accordance with the Technical Meeting Convention Rules, the document is forwarded directly to the Standards Council for action on issuance. Objections are deemed to be resolved for these documents.

VII. Step 4a: Council Appeals. Anyone can appeal to the Standards Council concerning procedural or substantive matters related to the development, content, or issuance of any document of the Association or on matters within the purview of the authority of the Council, as established by the *Bylaws* and as determined by the Board of Directors. Such appeals must be in written form and filed with the Secretary of the Standards Council (see 1.6 of *Regs*). Time constraints for filing an appeal must be in accordance with 1.6.2 of the *Regs*. Objections are deemed to be resolved if not pursued at this level.

VIII. Step 4b: Document Issuance. The Standards Council is the issuer of all documents (see Article 8 of *Bylaws*). The Council acts on the issuance of a document presented for action at an Association Technical Meeting within 75 days from the date of the recommendation from the Association Technical Meeting, unless this period is extended by the Council (see 4.8 of *Regs*). For documents forwarded directly to the Standards Council, the Council acts on the issuance of the document at its next scheduled meeting, or at such other meeting as the Council may determine (see 4.5.6 and 4.8 of *Regs*).

IX. Petitions to the Board of Directors. The Standards Council has been delegated the responsibility for the administration of the codes and standards development process and the issuance of documents. However, where extraordinary circumstances requiring the intervention of the Board of Directors exist, the Board of Directors may take any action necessary to fulfill its obligations to preserve the integrity of the codes and standards development process and to protect the interests of the Association. The rules for petitioning the Board of Directors can be found in the *Regulations Governing Petitions to the Board of Directors from Decisions of the Standards Council* and in 1.7 of the *Regs*.

X. For More Information. The program for the Association Technical Meeting (as well as the NFPA website as information becomes available) should be consulted for the date on which each report scheduled for consideration at the meeting will be presented. For copies of the ROP and ROC as well as more information on NFPA rules and for up-to-date information on schedules and deadlines for processing NFPA documents, check the NFPA website (www.nfpa.org) or contact NFPA Codes & Standards Administration at (617-984-7246).

2010 Annual Revision Cycle ROP Contents

by NFPA Numerical Designation

Note: Documents appear in numerical order.

NFPA No.	Type Action	Title	Page No.
25	P	Standard for the Inspection, Testing, and Maintenance of Water-Based Fire Protection Systems	25-1
30B	P	Code for the Manufacture and Storage of Aerosol Products	30B-1
33	P	Standard for Spray Application Using Flammable or Combustible Materials.....	33-1
34	P	Standard for Dipping and Coating Processes Using Flammable or Combustible Liquids..... To be retitled as Standard for Dipping, Coating, and Printing Processes Using Flammable or Combustible Liquids	34-1
40	P	Standard for the Storage and Handling of Cellulose Nitrate Film.....	40-1
58	P	Liquefied Petroleum Gas Code.....	58-1
73	P	Electrical Inspection Code for Existing Dwellings	73-1
		To be retitled as Standard for Electrical Inspections for Existing Dwellings	
86	P	Standard for Ovens and Furnaces	86-1
87	N	Recommended Practice for Fluid Heaters.....	87-1
88A	P	Standard for Parking Structures	88A-1
96	P	Standard for Ventilation Control and Fire Protection of Commercial Cooking Operations	96-1
160	P	Standard for the Use of Flame Effects Before an Audience.....	160-1
303	P	Fire Protection Standard for Marinas and Boatyards	303-1
307	P	Standard for the Construction and Fire Protection of Marine Terminals, Piers, and Wharves	307-1
312	P	Standard for Fire Protection of Vessels During Construction, Conversion, Repair, and Lay-Up.....	312 -1
502	P	Standard for Road Tunnels, Bridges, and Other Limited Access Highways	502-1
556	N	Guide on Methods for Evaluating Fire Hazard to Occupants of Passenger Road Vehicles.....	556-1
654	P	Standard for the Prevention of Fire and Dust Explosions from the Manufacturing, Processing, and Handling of Combustible Particulate Solids.....	654-1
780	P	Standard for the Installation of Lightning Protection Systems	780-1
1000	P	Standard for Fire Service Professional Qualifications Accreditation and Certification Systems.....	1000-1
1071	C	Standard for Emergency Vehicle Technician Professional Qualifications	1071-1
1126	P	Standard for the Use of Pyrotechnics Before a Proximate Audience	1126-1
1145	P	Guide for the Use of Class A Foams in Manual Structural Fire Fighting.....	1145-1

TYPES OF ACTION

P Partial Revision **C** Complete Revision **N** New Document **R** Reconfirmation **W** Withdrawal

**2010 Annual Revision Cycle ROP
Committees Reporting**

		Type Action	Page No.
Aerosol Products			
30B	Code for the Manufacture and Storage of Aerosol Products	P	30B-1
Finishing Processes			
33	Standard for Spray Application Using Flammable or Combustible Materials	P	33-1
34	Standard for Dipping and Coating Processes Using Flammable or Combustible Liquids	P	34-1
Forest and Rural Fire Protection			
1145	Guide for the Use of Class A Foams in Manual Structural Fire Fighting	P	1145-1
Garages and Parking Structures			
88A	Standard for Parking Structures	P	88A-1
Handling and Conveying of Dusts, Vapors, and Gases			
654	Standard for the Prevention of Fire and Dust Explosions from the Manufacturing, Processing, and Handling of Combustible Particulate Solids	P	654-1
Hazard and Risk of Contents and Furnishings			
556	Guide on Methods for Evaluating Fire Hazard to Occupants of Passenger Road Vehicles	N	556-1
Hazardous Chemicals			
40	Standard for the Storage and Handling of Cellulose Nitrate Film	P	40-1
Inspection, Testing, and Maintenance of Water-Based Systems			
25	Standard for the Inspection, Testing, and Maintenance of Water-Based Fire Protection Systems	P	25-1
Lightning Protection			
780	Standard for the Installation of Lightning Protection Systems	P	780-1
Liquefied Petroleum Gases			
58	Liquefied Petroleum Gas Code	P	58-1
Marinas and Boatyards			
303	Fire Protection Standard for Marinas and Boatyards	P	303-1
Marine Terminals			
307	Standard for the Construction and Fire Protection of Marine Terminals, Piers, and Wharves	P	307-1
National Electrical Code			
Electrical Systems Maintenance			
73	Electrical Inspection Code for Existing Dwellings	P	73-1
Ovens and Furnaces			
86	Standard for Ovens and Furnaces	P	86-1
87	Recommended Practice for Fluid Heaters	N	87-1
Professional Qualifications			
Accreditation and Certification to Fire Service Professional Qualifications			
1000	Standard for Fire Service Professional Qualifications Accreditation and Certification Systems	P	1000-1
Emergency Vehicle Mechanic Technicians Professional Qualifications			
1071	Standard for Emergency Vehicle Technician Professional Qualifications	C	1071-1
Road Tunnel and Highway Fire Protection			
502	Standard for Road Tunnels, Bridges, and Other Limited Access Highways	P	502-1
Shipbuilding, Repair, and Lay-Up			
312	Standard for Fire Protection of Vessels During Construction, Conversion, Repair, and Lay-Up	P	312-1
Special Effects			
160	Standard for the Use of Flame Effects Before an Audience	P	160-1
1126	Standard for the Use of Pyrotechnics Before a Proximate Audience	P	1126-1
Venting Systems for Cooking Appliances			
96	Standard for Ventilation Control and Fire Protection of Commercial Cooking Operations	P	96-1

COMMITTEE MEMBER CLASSIFICATIONS^{1,2,3,4}

The following classifications apply to Committee members and represent their principal interest in the activity of the Committee.

1. M Manufacturer: A representative of a maker or marketer of a product, assembly, or system, or portion thereof, that is affected by the standard.
2. U User: A representative of an entity that is subject to the provisions of the standard or that voluntarily uses the standard.
3. IM Installer/Maintainer: A representative of an entity that is in the business of installing or maintaining a product, assembly, or system affected by the standard.
4. L Labor: A labor representative or employee concerned with safety in the workplace.
5. RT Applied Research/Testing Laboratory: A representative of an independent testing laboratory or independent applied research organization that promulgates and/or enforces standards.
6. E Enforcing Authority: A representative of an agency or an organization that promulgates and/or enforces standards.
7. I Insurance: A representative of an insurance company, broker, agent, bureau, or inspection agency.
8. C Consumer: A person who is or represents the ultimate purchaser of a product, system, or service affected by the standard, but who is not included in (2).
9. SE Special Expert: A person not representing (1) through (8) and who has special expertise in the scope of the standard or portion thereof.

NOTE 1: "Standard" connotes code, standard, recommended practice, or guide.

NOTE 2: A representative includes an employee.

NOTE 3: While these classifications will be used by the Standards Council to achieve a balance for Technical Committees, the Standards Council may determine that new classifications of member or unique interests need representation in order to foster the best possible Committee deliberations on any project. In this connection, the Standards Council may make such appointments as it deems appropriate in the public interest, such as the classification of "Utilities" in the National Electrical Code Committee.

NOTE 4: Representatives of subsidiaries of any group are generally considered to have the same classification as the parent organization.

**FORM FOR COMMENT ON NFPA REPORT ON PROPOSALS
2010 ANNUAL REVISION CYCLE
FINAL DATE FOR RECEIPT OF COMMENTS: 5:00 pm EDST, September 4, 2009**

For further information on the standards-making process, please contact the Codes and Standards Administration at 617-984-7249 or visit www.nfpa.org/codes.

For technical assistance, please call NFPA at 1-800-344-3555.

FOR OFFICE USE ONLY

Log #: _____

Date Rec'd: _____

Please indicate in which format you wish to receive your ROP/ROC electronic paper download
(Note: If choosing the download option, you must view the ROP/ROC from our website; no copy will be sent to you.)

Date 8/1/200X Name John B. Smith Tel. No. 253-555-1234

Company _____ Email _____

Street Address 9 Seattle St. City Tacoma State WA Zip 98402

***If you wish to receive a hard copy, a street address MUST be provided. Deliveries cannot be made to PO boxes.

Please indicate organization represented (if any) Fire Marshals Assn. of North America

1. (a) NFPA Document Title National Fire Alarm Code NFPA No. & Year NFPA 72, 200X ed.

(b) Section/Paragraph 4.4.1.1

2. Comment on Proposal No. (from ROP): 72-7

3. Comment Recommends (check one): new text revised text deleted text

4. Comment (include proposed new or revised wording, or identification of wording to be deleted): [Note: Proposed text should be in legislative format; i.e., use underscore to denote wording to be inserted (inserted wording) and strike-through to denote wording to be deleted (~~deleted wording~~).]

Delete exception.

5. **Statement of Problem and Substantiation for Comment:** (Note: State the problem that would 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.)

A properly installed and maintained system should be free of ground faults. The occurrence of one or more ground faults should be required to cause a 'trouble' signal because it indicates a condition that could contribute to future malfunction of the system. Ground fault protection has been widely available on these systems for years and its cost is negligible. Requiring it on all systems will promote better installations, maintenance and reliability.

6. Copyright Assignment

(a) I am the author of the text or other material (such as illustrations, graphs) proposed in the Comment.

(b) Some or all of the text or other material proposed in this Comment was not authored by me. Its source is as follows: (please identify which material and provide complete information on its source)

I hereby grant and assign to the NFPA all and full rights in copyright in this Comment and understand that I acquire no rights in any publication of NFPA in which this Comment in this or another similar or analogous form is used. Except to the extent that I do not have authority to make an assignment in materials that I have identified in (b) above, I hereby warrant that I am the author of this Comment and that I have full power and authority to enter into this assignment.

Signature (Required) _____

PLEASE USE SEPARATE FORM FOR EACH COMMENT

Mail to: Secretary, Standards Council · National Fire Protection Association
1 Batterymarch Park · Quincy, MA 02169-7471 OR
Fax to: (617) 770-3500 OR Email to: proposals_comments@nfpa.org

5/27/2009

**FORM FOR COMMENT ON NFPA REPORT ON PROPOSALS
2010 ANNUAL REVISION CYCLE
FINAL DATE FOR RECEIPT OF COMMENTS: 5:00 pm EDST, September 4, 2009**

For further information on the standards-making process, please contact the Codes and Standards Administration at 617-984-7249 or visit www.nfpa.org/codes.

For technical assistance, please call NFPA at 1-800-344-3555.

FOR OFFICE USE ONLY

Log #: _____

Date Rec'd: _____

Please indicate in which format you wish to receive your ROP/ROC electronic paper download
(Note: If choosing the download option, you must view the ROP/ROC from our website; no copy will be sent to you.)

Date _____ Name _____ Tel. No. _____

Company _____ Email _____

Street Address _____ City _____ State _____ Zip _____

*****If you wish to receive a hard copy, a street address MUST be provided. Deliveries cannot be made to PO boxes.**

Please indicate organization represented (if any) _____

1. (a) NFPA Document Title _____ NFPA No. & Year _____

(b) Section/Paragraph _____

2. Comment on Proposal No. (from ROP): _____

3. Comment Recommends (check one): new text revised text deleted text

4. Comment (include proposed new or revised wording, or identification of wording to be deleted): [Note: Proposed text should be in legislative format; i.e., use underscore to denote wording to be inserted (inserted wording) and strike-through to denote wording to be deleted (~~deleted wording~~).]

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(b) Some or all of the text or other material proposed in this Comment was not authored by me. Its source is as follows: (please identify which material and provide complete information on its source)

I hereby grant and assign to the NFPA all and full rights in copyright in this Comment and understand that I acquire no rights in any publication of NFPA in which this Comment in this or another similar or analogous form is used. Except to the extent that I do not have authority to make an assignment in materials that I have identified in (b) above, I hereby warrant that I am the author of this Comment and that I have full power and authority to enter into this assignment.

Signature (Required) _____

PLEASE USE SEPARATE FORM FOR EACH COMMENT

Mail to: Secretary, Standards Council · National Fire Protection Association
1 Batterymarch Park · Quincy, MA 02169-7471 OR
Fax to: (617) 770-3500 OR Email to: proposals_comments@nfpa.org

Sequence of Events Leading to Issuance of an NFPA Committee Document

Step 1 Call for Proposals

▼ Proposed new document or new edition of an existing document is entered into one of two yearly revision cycles, and a Call for Proposals is published.

Step 2 Report on Proposals (ROP)

▼ Committee meets to act on Proposals, to develop its own Proposals, and to prepare its Report.

▼ Committee votes by written ballot on Proposals. If two-thirds approve, Report goes forward. Lacking two-thirds approval, Report returns to Committee.

▼ Report on Proposals (ROP) is published for public review and comment.

Step 3 Report on Comments (ROC)

▼ Committee meets to act on Public Comments to develop its own Comments, and to prepare its report.

▼ Committee votes by written ballot on Comments. If two-thirds approve, Report goes forward. Lacking two-thirds approval, Report returns to Committee.

▼ Report on Comments (ROC) is published for public review.

Step 4 Association Technical Meeting

▼ "*Notices of intent to make a motion*" are filed, are reviewed, and valid motions are certified for presentation at the Association Technical Meeting. ("Consent Documents" that have no certified motions bypass the Association Technical Meeting and proceed to the Standards Council for issuance.)

▼ NFPA membership meets each June at the Association Technical Meeting and acts on Technical Committee Reports (ROP and ROC) for documents with "certified amending motions."

▼ Committee(s) vote on any amendments to Report approved at NFPA Annual Membership Meeting.

Step 5 Standards Council Issuance

▼ Notification of intent to file an appeal to the Standards Council on Association action must be filed within 20 days of the NFPA Annual Membership Meeting.

▼ Standards Council decides, based on all evidence, whether or not to issue document or to take other action, including hearing any appeals.

The Association Technical Meeting

The process of public input and review does not end with the publication of the ROP and ROC. Following the completion of the Proposal and Comment periods, there is yet a further opportunity for debate and discussion through the Association Technical Meeting that takes place at the NFPA Annual Meeting.

The Association Technical Meeting provides an opportunity for the final Technical Committee Report (i.e., the ROP and ROC) on each proposed new or revised code or standard to be presented to the NFPA membership for the debate and consideration of motions to amend the Report. The specific rules for the types of motions that can be made and who can make them are set forth in NFPA's rules, which should always be consulted by those wishing to bring an issue before the membership at an Association Technical Meeting. The following presents some of the main features of how a Report is handled.

The Filing of a Notice of Intent to Make a Motion. Before making an allowable motion at an Association Technical Meeting, the intended maker of the motion must file, in advance of the session, and within the published deadline, a Notice of Intent to Make a Motion. A Motions Committee appointed by the Standards Council then reviews all notices and certifies all amending motions that are proper. The Motions Committee can also, in consultation with the makers of the motions, clarify the intent of the motions and, in certain circumstances, combine motions that are dependent on each other together so that they can be made in one single motion. A Motions Committee report is then made available in advance of the meeting listing all certified motions. Only these Certified Amending Motions, together with certain allowable Follow-Up Motions (that is, motions that have become necessary as a result of previous successful amending motions) will be allowed at the Association Technical Meeting.

Consent Documents. Often there are codes and standards up for consideration by the membership that will be noncontroversial and no proper Notices of Intent to Make a Motion will be filed. These "Consent Documents" will bypass the Association Technical Meeting and head straight to the Standards Council for issuance. The remaining documents are then forwarded to the Association Technical Meeting for consideration of the NFPA membership.

What Amending Motions Are Allowed. The Technical Committee Reports contain many Proposals and Comments that the Technical Committee has rejected or revised in whole or in part. Actions of the Technical Committee published in the ROP may also eventually be rejected or revised by the Technical Committee during the development of its ROC. The motions allowed by NFPA rules provide the opportunity to propose amendments to the text of a proposed code or standard based on these published Proposals, Comments, and Committee actions. Thus, the list of allowable motions include motions to accept Proposals and Comments in whole or in part as submitted or as modified by a Technical Committee action. Motions are also available to reject an accepted Comment in whole or part. In addition, Motions can be made to return an entire Technical Committee Report or a portion of the Report to the Technical Committee for further study.

The NFPA Annual Meeting, also known as the NFPA Conference & Expo, takes place in June of each year. A second Fall membership meeting was discontinued in 2004, so the NFPA Technical Committee Report Session now runs once each year at the Annual Meeting in June.

Who Can Make Amending Motions. NFPA rules also define those authorized to make amending motions. In many cases, the maker of the motion is limited by NFPA rules to the original submitter of the Proposal or Comment or his or her duly authorized representative. In other cases, such as a Motion to Reject an accepted Comment, or to Return a Technical Committee Report or a portion of a Technical Committee Report for Further Study, anyone can make these motions. For a complete explanation, the NFPA Regs should be consulted.

Action on Motions at the Association Technical Meeting. In order to actually make a Certified Amending Motion at the Association Technical Meeting, the maker of the motion must sign in at least an hour before the session begins. In this way a final list of motions can be set in advance of the session. At the session, each proposed document up for consideration is presented by a motion to adopt the Technical Committee Report on the document. Following each such motion, the presiding officer in charge of the session opens the floor to motions on the document from the final list of Certified Amending Motions followed by any permissible Follow-Up Motions. Debate and voting on each motion proceeds in accordance with NFPA rules. NFPA membership is not required in order to make or speak to a motion, but voting is limited to NFPA members who have joined at least 180 days prior to the Association Technical Meeting and have registered for the meeting. At the close of debate on each motion, voting takes place, and the motion requires a majority vote to carry. In order to amend a Technical Committee Report, successful amending motions must be confirmed by the responsible Technical Committee, which conducts a written ballot on all successful amending motions following the meeting and prior to the document being forwarded to the Standards Council for issuance.

Standards Council Issuance

One of the primary responsibilities of the NFPA Standards Council, as the overseer of the NFPA codes and standards development process, is to act as the official issuer of all NFPA codes and standards. When it convenes to issue NFPA documents, it also hears any appeals related to the document. Appeals are an important part of assuring that all NFPA rules have been followed and that due process and fairness have been upheld throughout the codes and standards development process. The Council considers appeals both in writing and through the conduct of hearings at which all interested parties can participate. It decides appeals based on the entire record of the process as well as all submissions on the appeal. After deciding all appeals related to a document before it, the Council, if appropriate, proceeds to issue the document as an official NFPA code or standard. Subject only to limited review by the NFPA Board of Directors, the decision of the Standards Council is final, and the new NFPA code or standard becomes effective twenty days after Standards Council issuance.

Report of the Technical Correlating Committee on

National Electrical Code® (NEC-AAC)

James W. Carpenter, *Chair*
International Association of Electrical Inspectors, TX [E]

Mark W. Earley, *Secretary (Staff-Nonvoting)*
National Fire Protection Association, MA

Jean A. O'Connor, *Recording Secretary (Non Voting)*
National Fire Protection Association, MA

James E. Brunssen, Telcordia, NJ [UT]
Rep. Alliance for Telecommunications Industry Solutions
Merton W. Bunker, Jr., US Department of State, VA [U]
(VL to Document: 110, Document: 111, Document: 70, Document: 70B,
Document: 70E, Document: 79)
James M. Daly, General Cable, NJ [M]
Rep. National Electrical Manufacturers Association
William R. Drake, Marinco, CA [M]
Stanley J. Folz, Morse Electric Company, NV [IM]
Rep. National Electrical Contractors Association
Palmer L. Hickman, National Joint Apprentice & Training Committee, MD [L]
Rep. International Brotherhood of Electrical Workers
John R. Kovacik, Underwriters Laboratories Inc., IL [RT]
Neil F. LaBrake, Jr., National Grid, NY [UT]
Rep. Electric Light & Power Group/EEI
Danny Liggett, DuPont Company, TX [U]
Rep. American Chemistry Council
Robert G. Wilkinson, IEC Texas Gulf Coast, TX [IM]
Rep. Independent Electrical Contractors, Inc.

Alternates

Thomas L. Adams, Engineering Consultant, IL [UT]
(Alt. to Neil F. LaBrake, Jr.)
Larry D. Cogburn, Cogburn Bros, Inc., FL [IM]
(Alt. to Stanley J. Folz)
James T. Dollard, Jr., IBEW Local Union 98, PA [L]
(Alt. to Palmer L. Hickman)
Ernest J. Gallo, Telcordia Technologies, Inc., NJ [UT]
(Alt. to James E. Brunssen)
David L. Hittinger, IEC of Greater Cincinnati, OH [IM]
(Alt. to Robert G. Wilkinson)
Daniel J. Kissane, Pass & Seymour/Legrand, NY [M]
(Alt. to James M. Daly)
Michael E. McNeil, FMC Bio Polymer, ME [U]
(Alt. to Danny Liggett)
Mark C. Ode, Underwriters Laboratories Inc., NC [RT]
(Alt. to John R. Kovacik)
Richard P. Owen, City of St. Paul, MN [E]
(Alt. to James W. Carpenter)

Nonvoting

David Mascarenhas, Canadian Standards Association, Canada [RT]
Richard G. Biermann, Biermann Electric Company, Inc., IA [IM]
(Member Emeritus)
D. Harold Ware, Libra Electric Company, OK [IM]
(Member Emeritus)

Staff Liaison: **Mark W. Earley**

Committee Scope: This Committee shall have primary responsibility for documents on minimizing the risk of electricity as a source of electric shock and as a potential ignition source of fires and explosions. It shall also be responsible for text to minimize the propagation of fire and explosions due to electrical installations.

Report of the Technical Committee on

Electrical Systems Maintenance [EFM-AAA]

Merton W. Bunker, Jr., *Chair*
US Department of State, VA [U]

Stephen L. Dyrnes, *Secretary*
Dyrnes Engineering Company, OR [SE]
Rep. Institute of Electrical & Electronics Engineers, Inc.

William D. Black, Copper Development Association, NY [M]
Edward S. Charkey, New City, NY [SE]
Leonard F. Devine, Jr., Palm Beach County, FL [E]
Rep. International Association of Electrical Inspectors
Michael D. DeVore, State Farm Insurance Company, IL [I]
David A. Dini, Underwriters Laboratories Inc., IL [RT]
Todd Kerkhoff, Consolidated Fire District #2, KS [E]
Alan Manche, Square D Company/Schneider Electric, KY [M]
Rep. National Electrical Manufacturers Association
Somnath Mukherjee, Port Authority of New York & New Jersey, NJ [U]
Greg A. Phillips, PTS Electric, NC [IM]
Michael L. Savage, Sr., Middle Department Inspection Agency, Inc., MD [E]
James Van Den Heuvel, Village of Hobart, WI [E]
John A. Worsham, Engineering Design & Testing Corporation, AL [SE]

Alternates

Thomas A. Domitrovich, Eaton Corporation, PA [M]
(Alt. to Alan Manche)
Roger D. McDaniel, Georgia Power Company, GA [U]
(Voting Alt. to Electric Light & Power Group/EEI)

Nonvoting

Douglas A. Lee, US Consumer Product Safety Commission, MD [C]
Andrew M. Trotta, US Consumer Product Safety Commission, MD [C]
(Alt. to Douglas A. Lee)

Staff Liaison: **Christopher D. Coache**

Committee Scope: This Committee shall have primary responsibility for documents on the maintenance of electrical systems in existing one-family, two-family, and multifamily dwellings. This Committee shall report to the Technical Correlating Committee of the National Electrical Code.

These lists represent the membership at the time the Committee was balloted on the text of this edition. Since that time, changes in the membership may have occurred. A key to classifications is found at the front of this book.

The Report of the Committee on **National Electrical Code** is presented for adoption, as follows:

This Report was prepared by the **Technical Committee on Electrical Systems Maintenance** and proposes for adoption, amendments to NFPA 73, **Electrical Inspection Code for Existing Dwellings**, 2006 edition. NFPA 73-2006 is published in Volume 6 of the 2009 National Fire Codes and in separate pamphlet form.

NFPA 73 after adoption has been retitled to NFPA 73, *Standard for Electrical Inspections for Existing Dwellings*.

This Report has been submitted to letter ballot of the **Technical Committee on Electrical Systems Maintenance**, which consists of 15 voting members. The results of the balloting, after circulation of any negative votes, can be found in the report.

This Report on Proposals has also been submitted to the **Technical Correlating Committee on National Electrical Code (TCC)** in two parts. Part 1 is a letter ballot on the TCC Actions, if any; and Part 2 is an informational letter ballot on the Report as a whole. The TCC, which consists of 10 voting members, voted as follows:

Part 1: 10 voted affirmatively

Part 2: 10 voted affirmatively

73-1 Log #CPI EFM-AAA **Final Action: Accept**
(Entire Document)

Submitter: Technical Committee on Electrical Systems Maintenance,
Recommendation: Review entire document to: 1) Update any extracted material by preparing separate proposals to do so, and 2) review and update references to other organizations documents, by preparing proposal(s) as required.

Substantiation: To conform to the NFPA Regulations Governing Committee Projects.

Committee Meeting Action: Accept
Number Eligible to Vote: 15

Ballot Results: Affirmative: 13

Ballot Not Returned: 2 Mukherjee, S., Phillips, G.

73-2 Log #5 EFM-AAA **Final Action: Accept**
(Title)

TCC Action: The Technical Correlating Committee advises that document titles are the responsibility of the Technical Correlating Committee and the Technical Correlating Committee Accepts the Technical Committee's action.

Submitter: Todd Kerkhoff, Consolidated Fire District #2

Recommendation: Revise text as follows:

NFPA 73 Electrical Inspection Code for Existing Dwellings, Standard for Electrical Inspections for Existing Dwellings.

Substantiation: In order for this document to be utilized by the Home Inspection industry the word "Code" simply cannot appear. Any Home Inspector will quickly acknowledge that they are not "Code" inspectors and do not inspect to a code. They operate under a Standard of Practice that comes from the organizations that they belong to, such as The American Society of Home Inspectors (ASHI). Of course, changing the document from a Code to a Standard allows the main text of the document to maintain mandatory provisions using the word "shall" to indicate requirements, but removes the stigma of the word "Code" for the Home Inspection Industry.

Committee Meeting Action: Accept

Committee Statement: The committee is aware that the name of this document is the jurisdiction of the Standards Council and that concurrence of the NEC Technical Correlating Committee is also necessary.

If this document name change is approved, references within the document will need to be updated accordingly.

The committee is recommending the change from a Code to a Standard because the adoption of NFPA 73 has had limited acceptance, therefore, the adoption of NFPA 73, designated as a code, has had limited accepted by jurisdictions across the country.

The committee seeks to enhance usability and acceptance of NFPA 73, and changing from a "code" to a "standard" is acknowledged by the home inspection community as being more accepted as a standard. There is also historical evidence that NFPA standards are legally adopted by jurisdictions across the country.

Number Eligible to Vote: 15

Ballot Results: Affirmative: 13

Ballot Not Returned: 2 Mukherjee, S., Phillips, G.

73-3 Log #15 EFM-AAA **Final Action: Accept in Principle**
(Chapter 1)

TCC Action: The Technical Correlating Committee advises that Chapter Scope statements are the responsibility of the Technical Correlating Committee and directs that the Technical Committee clarify the committee action on this proposal related to the use of the word "code" based on the action taken by the Technical Correlating Committee on Proposal 73-2.

This action will be considered by the Technical Committee as a Public Comment.

Submitter: Michael D. DeVore, State Farm Insurance Company

Recommendation: Revise text as follows:

1.1 Scope.

~~1.1.1~~ This code provides criteria that enable the for identification of the hazardous conditions that are evident during a visual inspection of the electrical systems in existing one-family, two-family, and multifamily dwellings, including mobile homes and manufactured homes.

~~1.1.2~~ This code does not define installation requirements that might be desired for convenience or utilitarian purposes.

1.2* Purpose.

The purpose of this code is to provide requirements inspection and testing procedures and practices for evaluating the safety of installed electrical systems within and associated with existing dwellings, to identify safety hazards, fire hazards, hazards, deterioration, abuse, on-code complaint installations, and so forth.

1.3 Application.

1.3.1 This code shall apply to hazardous conditions of electrical systems including but not limited to:

- 1) Safety hazards
- 2) Fire hazards

3) Shock hazards

4) Overheating conditions

5) Physical deterioration

6) Abuse

7) Non-compliant installations

~~1.3.1-2~~ This code applies to accessible electrical equipment—in existing dwellings—and those portions of the electrical system that are accessible without removing any permanent part of the building structure or finish of existing dwellings:

~~1.3.2-3~~ The removal of faceplates or other covers or luminaires (fixtures) to identify hazards shall be permitted.

~~1.3.3-4~~ These inspection procedures shall not damage the building structure, wiring, or equipment.

~~1.3.4-5~~ Inspections in accordance with this code do not necessarily identify future conditions such as failure of components or other portions of equipment or wiring.

~~1.3.5-6~~ This code does not apply to the inspection of new construction, recreational vehicles, or the factory-installed internal wiring and construction of appliances and utilization equipment.

~~1.3.7~~ This code does not define installation requirements that might be desired for convenience or utilitarian purposes.

1.4* Enforcement.

~~1.4.1~~ The authority having jurisdiction shall enforce and administer this code shall be administered and enforced by the authority having jurisdiction designated by the governing authority. (See Annex B for sample wording for enabling legislation.)

~~1.4.2-4~~ This code is intended to be suitable for mandatory application by governmental bodies and other inspection agencies exercising legal jurisdiction over electrical installations. See Annex B for sample wording for enabling legislation.

~~1.4.1-2~~ The authority having jurisdiction of enforcement of this code shall have the responsibility for making interpretations of the rules and for deciding on the approval of equipment and materials.

~~1.4.1-2.1~~ Where remedial action is required by the authority having jurisdiction, it shall be performed in accordance with NFPA 70, *National Electrical Code*.

~~1.4.1-2.2~~ This code is intended to require only the remedial action necessary to correct the identified hazards.

1.5 Equivalency

~~1.4.2-5.1~~ Devices, systems, or methods that differ from those in this code shall be permitted to be examined or tested according to the intent of this code.

~~1.5.2~~ The authority having jurisdiction shall be permitted to waive specific requirements in this code or permit alternate methods where it is assured that approve devices, systems, or methods found to be equivalent in compliance with 1.5.1 objectives can be achieved by maintaining effective safety.

~~1.5.3~~ Technical documentation shall be submitted to the authority having jurisdiction to demonstrate compliance with 1.5.1.

Substantiation: • Section 1.1, Scope: In paragraph 1.1.1 no machine or person is being "enabled". This is the reason for the deletion. The phrase "evident during visual inspection" is covered in section 1.3 under Application.

• Paragraph 1.1.2 is an exclusion to the application of the code and is moved to paragraph 1.3.7.

• The annex to section 1.2 is about enforcement of the code and is moved to be annex paragraph A.1.4 for section 1.4, which is Enforcement.

• Section 1.2 is modified to give clearer definition to the purpose of this code. Namely it is to provide inspection and test requirements for evaluating the safety of installed electrical systems. The list of safety items is moved to section 1.3.1 under Application. Testing is referenced in sections 4.9.7, 4.9.8, 5.1 and 5.2

• Paragraph 1.3.1 is the list from the Purpose above.

• Paragraph 1.3.2 is modified to delete the portion that is the definition of accessible from Chapter 3.

• Renumber the remaining existing paragraphs of section 1.3.

• Paragraph 1.3.7 is the former paragraph 1.1.2.

• Section 1.4 is rewritten for editorial clarity and to add the annex item that was originally associated with section 1.2 and the italic note from section 1.4.

• Paragraph 1.4.1 is renumbered and the phrase "enforcement of this code" is deleted because it is part of the definition of AHJ.

• Renumber the remaining paragraphs of Section 1.4 and make editorial change.

• Paragraph 1.4.2 is moved to new section 1.5, Equivalency to add clarity and more closely match the Manual of Style.

Committee Meeting Action: Accept in Principle

In the proposed wording, delete all of Section 1.4 "Enforcement", except for 1.4.2.2 that is to be renumbered as 1.3.8, and renumber the subsequent sections accordingly.

Committee Statement: See the committee action on Proposal 73-2 (Log 5).

Number Eligible to Vote: 15

Ballot Results: Affirmative: 13

Ballot Not Returned: 2 Mukherjee, S., Phillips, G.

73-4 Log #36 EFM-AAA
(1.4.2)**Final Action: Reject****Submitter:** Steven F. Wydeveld, Village of Homer Glen**Recommendation:** Revise text as follows:

1.4.2 The authority having jurisdiction shall be permitted to waive specific requirements in this code or permit alternate methods where it is assured that equivalent objectives can be achieved by maintaining effective safety.

Equivalency.

1.4.2.1 General. Nothing in this Code shall prohibit methods of construction, materials, and designs not specifically prescribed in this Code where equivalent alternatives are approved by the authority having jurisdiction.

1.4.2.2 Approval of Alternatives. Alternative systems, methods, or devices approved as equivalent by the authority having jurisdiction shall be recognized as being in compliance with this Code.

1.4.2.3 Tests.

1.4.2.3.1 Whenever the authority having jurisdiction determines that there is insufficient evidence of proof of equivalency with the prescribed requirements of this Code, the authority having jurisdiction shall be authorized to require tests showing proof of equivalency.

1.4.2.3.2 Tests required by the authority having jurisdiction shall be provided by the owner at no expense to the jurisdiction.

1.4.2.3.3 Tests shall be conducted as specified in this Code or, where test methods are not specified in this Code, they shall be conducted as required by the authority having jurisdiction.

1.4.2.4 Approval. The authority having jurisdiction shall determine whether the proposed alternate methods of construction, materials, and designs are at least equivalent to the prescribed requirements of this Code.

Substantiation: Note: This proposal was developed by the proponent as a member of the Building Code Development Committee (BCDC) with the committee's endorsement.

This text is extracted from NFPA 5000, Section 1.5. This should be extracted because the provisions in NFPA 5000 (and NFPA 101) are more comprehensive. Additionally, this would make the standard consistent with the Building Code and the Life Safety Code. Similar proposals have been submitted to other NFPA codes and standards.

Committee Meeting Action: Reject

Committee Statement: Since the committee has agreed to change the name of the document from a code to a standard, this proposed wording is no longer necessary.

See the committee actions and statements on Proposal 73-2 (Log 5) and Proposal 73-3 (Log 15).

Number Eligible to Vote: 15**Ballot Results:** Affirmative: 13**Ballot Not Returned:** 2 Mukherjee, S., Phillips, G.73-5 Log #16 EFM-AAA
(Chapter 2)**Final Action: Accept****Submitter:** Michael D. DeVore, State Farm Insurance Company**Recommendation:** Revise text as follows:**2.2 NFPA Publication.**

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

NFPA 70, *National Electrical Code*®, 2005-2008 edition.

2.3 Other Publication.

Merriam-Webster's Collegiate Dictionary, 11th edition, Merriam-Webster, Inc., Springfield, MA, 2003.

2.4 References for Extracts in Mandatory Sections.

NFPA 70, *National Electrical Code*®, 2005-2008 edition.

Substantiation: Change references to current editions.

Committee Meeting Action: Accept**Number Eligible to Vote: 15****Ballot Results:** Affirmative: 12 Negative: 1**Ballot Not Returned:** 2 Mukherjee, S., Phillips, G.**Explanation of Negative:**

SAVAGE, SR., M.: I do not believe the technical substantiation as given is justifiable. Many of the home inspectors I run across in my day to day activities are consistently citing "code" references, thereby in conflict with the submitters substantiation of home inspectors not inspecting to a code standard. Many times they are citing current day code text on houses 15 to 30 years old that can not meet a current code.

In addition, as a full time "Code" Inspector/Official, removing the term code from this document will effectively remove the provision allowing the independent adoption of this document from other codes and standards by the AHJ (see NFPA Official Definition of "Code").

73-6 Log #17 EFM-AAA
(Chapter 3 Various)**Final Action: Accept****Submitter:** Michael D. DeVore, State Farm Insurance Company**Recommendation:** Revise text as follows:

Chapter 3 – Extractions

3.3.1 Accessible.

3.3.1.1 Accessible (as applied to equipment). Admitting close approach; not guarded by locked doors, elevation, or other effective means. [70;100]

3.3.1.2 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 (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. [70;100]

3.3.1.2-3 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. **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. [70;100]

3.3.2 Appliance. Utilization equipment, generally other than industrial, normally built in standardized sizes or types, that is installed or connected as a unit to perform one or more functions such as clothes washing, air conditioning, food mixing, deep frying, and so forth.

Appliance. Utilization equipment, generally other than industrial, that is normally built in standardized sizes or types and is installed or connected as a unit to perform one or more functions such as clothes washing, air conditioning, food mixing, deep frying, and so forth. [70;100]

3.3.3 Arc-Fault Circuit Interrupter. A device intended to provide protection from the effects of arc faults by recognizing characteristics unique to arcing and by functioning to de-energize the circuit when an arc fault is detected. [70;210.12;2005]

3.3.4 Bonded (Bonding). Connected to establish electrical continuity and conductivity.

Bonding (Bonded). The permanent joining of metallic parts to form an electrically conductive path that ensures electrical continuity and the capacity to conduct safely any fault current likely to be imposed. [70;2005;100]

3.3.5 Branch Circuit. The circuit conductors between the final overcurrent device protecting the circuit and the outlet(s). [70;2005;100]

3.3.7 Conductor.

3.3.7.1 Grounded Conductor. A system or circuit conductor that is intentionally grounded. [70;2005;100]

3.3.7.2 Grounding Conductor. A conductor used to connect equipment or the grounded circuit of a wiring system to a grounding electrode or electrodes. [70;2005;100]

3.3.7.4 Grounding Electrode Conductor. A conductor used to connect the system grounded conductor or the equipment to a grounding electrode or to a point on the grounding electrode system. [70;100]

Grounding Electrode Conductor. The conductor used to connect the grounding electrodes to the equipment grounding conductor, to the grounded conductor, or to both, at the service, at each building or structure where supplied from a common service, or at the source of a separately derived system.

3.3.8 Dwelling Unit. A single unit, providing complete and independent living facilities for one or more persons, including permanent provisions for living, sleeping, cooking, and sanitation.

Dwelling Unit. One or more rooms for the use of one or more persons as a housekeeping unit with space for eating, living, cooking, and sleeping, and permanent provisions for sanitation. [70;100]

3.3.8.1 Dwelling, Multifamily. A building that contains three or more dwelling units. [70;100;2005]

3.3.8.2 Dwelling, One-Family. A building that consists solely of one dwelling unit. [70;100;2005]

3.3.8.3 Dwelling, Two-Family. A building that consists solely of two dwelling units. [70;100;2005]

3.3.10 Exposed (as applied to live parts). Capable of being inadvertently touched or approached nearer than a safe distance by a person. It is applied to parts that are not suitably guarded, isolated, or insulated. [70;2005;100]

3.3.X Feeder. All circuit conductors between the service equipment, the source of a separately derived system, or other power supply source and the final branch-circuit overcurrent device. [70;100]

3.3.11 Grounded (Grounding). Connected (connecting) to ground or to a conductive body that extends the ground connection.

Grounded. Connected to earth or to some conducting body that serves in place of the earth. [70;2005;100]

3.3.11.1 Grounded, Solidly. Connected to ground without inserting any resistor or impedance device.

Grounded, Effectively. Intentionally connected to earth through a ground connection or connections of sufficiently low impedance and having sufficient current-carrying capacity to prevent the buildup of voltages that may result in undue hazards to connected equipment or to persons. [70;2005;100]

3.3.12* Ground-Fault Circuit Interrupter (GFCI). A device intended for the protection of personnel that functions to de-energize a circuit or portion thereof within an established period of time when a current to ground exceeds the values established for a Class A device. [70;100]

A.3.3.12 Ground-Fault Circuit Interrupter (GFCI). Class A ground-fault circuit interrupters trip when the current to ground has a value in the range of 4 mA to 6 mA. For further information, see UL 943, *Standard for Ground-Fault Circuit Interrupters*.

Class A ground-fault circuit interrupters trip when the current to ground is 6 mA or higher and do not trip when the current to ground is less than 4 mA. For further information, see UL 943, *Standard for Ground-Fault Circuit Interrupters*. [70;100 FPN]

3.3.13 Grounding Electrode. A device that establishes an electrical connection to the earth.

Grounding Electrode. A conducting object through which a direct connection to earth is established. [70;100]

3.3.X Luminaire. A complete lighting unit consisting of a light source such as a lamp or lamps, together with the parts designed to position the light source and connect it to the power supply. It may also include parts to protect the light source or the ballast or to distribute the light. A lampholder itself is not a luminaire. [70;100]

3.3.Y.1* Circuit Breaker. A device designed to open and close a circuit by nonautomatic means and to open the circuit automatically on a predetermined overcurrent without damage to itself when properly applied within its rating. [70;100]

A.3.3.Y.1 The automatic opening means can be integral, direct acting with the circuit breaker, or remote from the circuit breaker. [70;100 FPN]

3.3.15 Outlet. A point on the wiring system at which current is taken to supply utilization equipment. [70;2005;100]

3.3.16 Panelboard. A single panel or group of panel units designed for assembly in the form of a single panel, including buses and automatic overcurrent devices, and equipped with or without switches for the control of light, heat, or power circuits; designed to be placed in a cabinet or cutout box placed in or against a wall, partition, or other support; and accessible only from the front. [70;100]

3.3.17 Raceway. An enclosed channel of metal or nonmetallic materials designed expressly for holding wires, cables, or busbars, with additional functions as permitted in NFPA 70. Raceways include, but are not limited to, rigid metal conduit, rigid nonmetallic conduit, intermediate metal conduit, liquidtight flexible conduit, flexible metallic tubing, flexible metal conduit, electrical nonmetallic tubing, electrical metallic tubing, underfloor raceways, cellular concrete floor raceways, cellular metal floor raceways, surface raceways, wireways, and busways. [70;2005;100]

3.3.18 Receptacle. A receptacle is a contact device installed at the outlet for the connection of an attachment plug. A single receptacle is a single contact device with no other contact device on the same yoke. A multiple receptacle is two or more contact devices on the same yoke. [70;2005;100]

3.3.20 Service. The conductors and equipment for delivering electric energy from the serving utility to the wiring system of the premises served. [70;2005;100]

3.3.X Switch, General-Use. A switch intended for use in general distribution and branch circuits. It is rated in amperes, and it is capable of interrupting its rated current at its rated voltage. [70;100]

3.3.21 Utilization Equipment. Equipment that utilizes electric energy for electronic, electromechanical, chemical, heating, lighting, or similar purposes. [70;2005;100]

Substantiation: Update definition extractions to NFPA 70: 2008 edition.

Committee Meeting Action: Accept

Number Eligible to Vote: 15

Ballot Results: Affirmative: 13

Ballot Not Returned: 2 Mukherjee, S., Phillips, G.

73-7 Log #18 EFM-AAA **Final Action:** Accept
(Chapter 3 Various)

Submitter: Michael D. DeVore, State Farm Insurance Company

Recommendation: Revise text as follows:

Chapter 3 – Deletions

3.3.6 Concealed. Rendered inaccessible by the structure or finish of the building. Wires in concealed raceways are considered concealed, even though they may become accessible by withdrawing them. [70;2005] / See 3.3.1.1 – Accessible (as applied to wiring methods) –

3.3.7.3 Grounding Conductor, Equipment. The conductor used to connect the non-current-carrying metal parts of equipment, raceways, and other enclosures to the system grounded conductor, the grounding electrode conductor, or to both, at the service equipment or at the source of a separately derived system. [70;2005]

3.3.7.3 Grounding Conductor, Equipment (EGC). The conductive path installed to connect normally non-current-carrying metal parts of equipment together and to the system grounded conductor or to the grounding electrode conductor, or both. [70;100]

3.3.15.1 Lighting Outlet. An outlet intended for the direct connection of a lampholder, a luminaire (lighting fixture), or a pendant cord terminating in a lampholder.

~~3.3.15.2 Receptacle Outlet.~~ An outlet where one or more receptacles are installed. [70;2005]

~~3.3.19 Receptacle Outlet.~~ See 3.3.15.2.

Substantiation: These terms are not used in the document and definitions are not needed. “Equipment grounding conductor” is used in section 4.8.5 and is updated to the current definition in NFPA 70.

Committee Meeting Action: Accept

Number Eligible to Vote: 15

Ballot Results: Affirmative: 13

Ballot Not Returned: 2 Mukherjee, S., Phillips, G.

73-8 Log #20 EFM-AAA **Final Action:** Accept
(3.3.x Overcurrent Protective Device (New))

Submitter: Michael D. DeVore, State Farm Insurance Company

Recommendation: Add new text as follows:

3.3.X Overcurrent Protective Device. A device that automatically interrupts the circuit when current in excess of a given rating flows through the circuit because of a short circuit, overload, or ground fault.

3.3.X.1 Circuit Breaker.

3.3.X.2 Fuse. An overcurrent protective device containing a conductor that melts when heated by an over-current condition; thus opening the circuit.

Substantiation: Supporting definitions for terms used in Paragraphs 4.3.4 and 4.3.5.

Committee Meeting Action: Accept

Committee Statement: The committee understands that the definition of “Circuit Breaker” was defined by the action taken on Proposal 73-6 (Log 17), and that the definition will be placed under “Overcurrent Protective Device” in this section.

Number Eligible to Vote: 15

Ballot Results: Affirmative: 13

Ballot Not Returned: 2 Mukherjee, S., Phillips, G.

73-9 Log #19 EFM-AAA **Final Action:** Reject
(3.3.X Cable and A.3.3.X (New))

Submitter: Michael D. DeVore, State Farm Insurance Company

Recommendation: Add new text as follows:

3.3.X Cable. A single insulated electrical conductor that is either stranded or solid wire, or a combination of electrical conductors insulated from each other, with or without an overall jacket.

A.3.3.X Technically, a wire is an individual conductor and a cable is composed of two or more wires surrounded by a jacket. However large-diameter wires may be referred to as cables. Two or more insulated wires or conductors bundled together and covered with an overall jacket may also be a cable.

Substantiation: Supporting definition for term used in Paragraphs 4.1.6, 4.2.3, and 4.4.1.

Committee Meeting Action: Reject

Committee Statement: The term “cable” is not defined in Article 100 of the NEC. As written, this definition could also apply to a flexible cord. Specific types of cables, such as armored cable, nonmetallic cable, etc., are defined in the NEC.

Number Eligible to Vote: 15

Ballot Results: Affirmative: 13

Ballot Not Returned: 2 Mukherjee, S., Phillips, G.

73-10 Log #1 **Final Action:** Reject
(3.3.2 Appliance)

Submitter: Glossary of Terms Technical Advisory Committee,

Recommendation: Revise as follows:

3.3.2 Appliance. Utilization equipment, generally other than industrial, normally built in standardized sizes or types and that is installed or connected as a unit to perform one or more functions such as clothes washing, air conditioning, heating, refrigeration, food preparation, electronics, or similar functions, food-mixing, deep frying, and so forth.

Substantiation: This proposal is intended to generate consistent definitions and minimize the number of duplicate definitions in the NFPA Glossary of Terms in accordance with the scope of the NFPA Glossary of Terms Technical Advisory Committee.

The proposed revised definition encompasses the terminology utilized in most of the current definitions and will combine four definitions into a single one.

Similar proposals will be submitted for NFPA 70, 70E, 97, 99, 211.

Committee Meeting Action: Reject

Committee Statement: This definition is extracted from the NEC (NFPA 70) and would first need to be revised in the NEC (NFPA 70) prior to inclusion in this document.

Number Eligible to Vote: 15

Ballot Results: Affirmative: 13

Ballot Not Returned: 2 Mukherjee, S., Phillips, G.

73-11 Log #4 EFM-AAA **Final Action: Reject**
(3.3.12 Ground-Fault Circuit-Interrupter (GFCI))

Submitter: James M. Daly, Upper Saddle River, NJ
Recommendation: Add a hyphen between “Circuit” and “Interrupter” and revise as shown:

3.3.12* Ground-Fault Circuit-Interrupter (GFCI). A device intended for the protection of personnel that functions to de-energize a circuit or portion thereof within an established period of time when a fault current to ground exceeds some predetermined value that is less than that required to operate the overcurrent protective device of the supply circuit the values established for a class A device. This device will not provide personnel protection from electrocution resulting from line-to-line contact since the nature of line-to-line loads cannot be distinguished.

Substantiation: The revised definition complies with the 2.3.2.3 in the NFPA Manual of Style which states: “Definitions shall not contain requirements.”

If it is essential that a class A GFCI be specified, then it should be done in the main body of the Code since there may be more than one class of GFCIs.

This proposal is intended to generate consistent definitions and minimize the number of duplicate definitions in the NFPA Glossary of Terms.

The addition of the last sentence is safety information to the user of the Standard.

The proposed wording should meet the intent of 3 preferred and 2 secondary definitions used in 8 NFPA Standards.

Similar proposals are being submitted to NFPA 70, 70B, 70E, 99, 99B, 302, and 1901.

Committee Meeting Action: Reject

Committee Statement: The proposed definition is not consistent with the definition for “ground-fault circuit interrupter” as found in Article 100 of the NEC (NFPA 70). The hyphen in the term is correct as currently stated. When the term is used as a noun, only the first pair of words are hyphenated.

Number Eligible to Vote: 15

Ballot Results: Affirmative: 13

Ballot Not Returned: 2 Mukherjee, S., Phillips, G.

Comment on Affirmative:

DEVORE, M.: Adding to the committee comment, this definition is extracted from the National Electrical Code and cannot be modified in this document. The submitter should consider submitting a Public Proposal to NFPA 70, National Electrical Code.

73-12 Log #2 EFM-AAA **Final Action: Reject**
(3.3.12 Ground-Fault Circuit Interrupter (GFCI))

Submitter: James M. Daly, Upper Saddle River, NJ

Recommendation: Add new text as follows:

3.3.12* Ground-Fault Circuit-Interrupter (GFCI). A device intended for the protection of personnel that functions to de-energize a circuit or portion thereof within an established period of time when a fault current to ground exceeds some predetermined value that is less than that required to operate the overcurrent protective device of the supply circuit the values established for a Class A device. This device will not provide personnel protection from electrocution resulting from line-to-line contact since the nature of line-to-line loads cannot be distinguished.

Substantiation: The revised definition complies with the 2.3.2.3 in the NFPA Manual of Style which states: “Definitions shall not contain requirements.”

If it is essential that a Class A GFCI be specified, then it should be done in the main body of the Code since there may be more than one class of GFCIs.

This proposal is intended to generate consistent definitions and minimize the number of duplicate definitions in the NFPA Glossary of Terms.

The addition of the last sentence is safety information to the user of the Standard.

The proposed wording should meet the intent of 3 preferred and 2 secondary definitions used in 8 NFPA Standards.

Similar proposals are being submitted to NFPA 70, 70B, 70E, 99, 99B, 302, and 1901.

Committee Meeting Action: Reject

Committee Statement: The proposed definition is not consistent with the definition for “ground-fault circuit interrupter” as found in Article 100 of the NEC (NFPA 70). The hyphen in the term is correct as currently stated. When the term is used as a noun, only the first pair of words are hyphenated.

Number Eligible to Vote: 15

Ballot Results: Affirmative: 13

Ballot Not Returned: 2 Mukherjee, S., Phillips, G.

Comment on Affirmative:

DEVORE, M.: Adding to the committee comment, this definition is extracted from the National Electrical Code and cannot be modified in this document. The submitter should consider submitting a Public Proposal to NFPA 70, National Electrical Code.

73-13 Log #21 EFM-AAA **Final Action: Accept**
(3.3.14 Likely to Become Energized)

Submitter: Michael D. DeVore, State Farm Insurance Company

Recommendation: Delete text as follows:

~~**3.3.14 Likely to Become Energized.** Failure of insulation:~~

Substantiation: This term is widely used in NFPA 70 without definition. It should not be defined further in this document.

Committee Meeting Action: Accept

Number Eligible to Vote: 15

Ballot Results: Affirmative: 13

Ballot Not Returned: 2 Mukherjee, S., Phillips, G.

73-14 Log #6 EFM-AAA **Final Action: Accept**
(4.1.8)

Submitter: Merton W. Bunker, Jr., US Department of State

Recommendation: Revise 4.1.8 to read as follows:

“4.1.8 Service-Entrance Equipment.

4.1.8.1 Service-entrance equipment shall be readily accessible.

4.1.8.2 Required access and working space shall be provided and maintained to permit ready and safe operation and maintenance.

4.1.8.3 Service-entrance equipment, cables, raceways, or conductors shall not show evidence of physical damage, overheating, corrosion, or other deterioration.”

Renumber subsequent sections.

Substantiation: This proposal contains no technical changes. It is solely intended to provide compliance with the NFPA Manual of Style.

Committee Meeting Action: Accept

Number Eligible to Vote: 15

Ballot Results: Affirmative: 13

Ballot Not Returned: 2 Mukherjee, S., Phillips, G.

73-15 Log #7 EFM-AAA **Final Action: Accept in Part**
(4.1.9)

Submitter: Merton W. Bunker, Jr., US Department of State

Recommendation: Revise 4.1.9 to read as follows:

“4.1.9 Service Equipment Grounding.

4.1.9.1 Service equipment shall be effectively grounded.

4.1.9.2 The grounding electrode conductor shall be sized, terminated, and connected to one or more grounding electrode(s) to provide low impedance, and have current carrying capacity to prevent the buildup of voltages that result in undue hazard to connected equipment or to persons.”

Substantiation: This proposal contains no technical changes. It is solely intended to provide compliance with the NFPA Manual of Style.

Committee Meeting Action: Accept in Part

In the recommended text, remove the word “effectively”. The remainder of the proposed text is Accepted as submitted.

Committee Statement: The committee understands that Section 4.1.10 was incorporated into this proposal.

Number Eligible to Vote: 15

Ballot Results: Affirmative: 13

Ballot Not Returned: 2 Mukherjee, S., Phillips, G.

73-16 Log #8 EFM-AAA **Final Action: Accept**
(4.1.11)

Submitter: Merton W. Bunker, Jr., US Department of State

Recommendation: Revise 4.1.11 to read as follows:

“4.1.11 Grounding Electrode Conductors.

4.1.11.1 The connection of a grounding electrode conductor or bonding jumper to a grounding electrode shall be made in a manner that will ensure a permanent and effective grounding path.

4.1.11.2 The grounding electrode conductor shall be connected to the grounding electrode.

4.1.11.3 The grounding electrode conductor and connector shall not show evidence of physical damage or deterioration.

4.1.11.4 The grounding electrode conductor shall be protected against physical damage as required.

4.1.11.5 Metal enclosures providing physical protection of the grounding electrode conductor shall be bonded at each end to the grounding electrode conductor.

4.1.11.6 The grounding electrode conductor shall be continuous in its length unless otherwise permitted to be spliced or joined.

4.1.11.7 Where tap conductors are connected to the grounding electrode conductor, they shall be connected in such a manner that the grounding electrode conductor remains without a splice.

4.1.11.8 The dwelling grounding electrode system and other grounding systems, such as those for communications, CATV, and satellite, shall be bonded together.”

Substantiation: This proposal contains no technical changes. It is solely intended to provide compliance with the NFPA Manual of Style.

Committee Meeting Action: Accept

Committee Statement: The committee understands that the proposed text will be numbered as Section 4.1.10.

Number Eligible to Vote: 15

Ballot Results: Affirmative: 13

Ballot Not Returned: 2 Mukherjee, S., Phillips, G.

73-17 Log #9 EFM-AAA **Final Action:** Accept
(4.2.1)

Submitter: Merton W. Bunker, Jr., US Department of State

Recommendation: Revise 4.2.1 to read as follows:

“4.2.1 Panelboards and distribution equipment shall be readily accessible.

4.2.2 Required access and working space shall be provided and maintained to permit ready and safe operation and maintenance.”

Renumber subsequent sections.

Substantiation: This proposal contains no technical changes, except for the word “readily” in proposed 4.2.1. It is intended to provide compliance with the NFPA Manual of Style.

Committee Meeting Action: Accept

Number Eligible to Vote: 15

Ballot Results: Affirmative: 13

Ballot Not Returned: 2 Mukherjee, S., Phillips, G.

73-18 Log #10 EFM-AAA **Final Action:** Accept
(4.2.7)

Submitter: Merton W. Bunker, Jr., US Department of State

Recommendation: Revise 4.2.7 to read as follows:

“4.2.7 Disconnecting means marking shall comply with 4.2.7.1 and 4.2.7.2.

4.2.7.1 Each disconnecting means for motors and appliances, and each service, feeder, or branch circuit at the point where it originates, shall be legibly marked to indicate its purpose unless located and arranged so the purpose is evident.

4.2.7.2 The marking shall be capable of withstanding the environment involved.”

Substantiation: This proposal contains no technical changes. It is solely intended to provide compliance with the NFPA Manual of Style.

Committee Meeting Action: Accept

Number Eligible to Vote: 15

Ballot Results: Affirmative: 13

Ballot Not Returned: 2 Mukherjee, S., Phillips, G.

73-19 Log #22 EFM-AAA **Final Action:** Accept
(4.3.4)

Submitter: Michael D. DeVore, State Farm Insurance Company

Recommendation: Revise text as follows:

4.3.4 Listed overcurrent protective devices, including circuit breakers and fuses, shall be used or installed in accordance with any instructions included in the listing or labeling.

Substantiation: Provide additional language to list the basic types of overcurrent protection devices that are used in residential construction.

Committee Meeting Action: Accept

Committee Statement: The committee understands that in the submitter’s substantiation the use of the word “list” was intended to itemize the material.

Number Eligible to Vote: 15

Ballot Results: Affirmative: 13

Ballot Not Returned: 2 Mukherjee, S., Phillips, G.

73-20 Log #CP2 EFM-AAA **Final Action:** Accept
(4.4)

Submitter: Technical Committee on Electrical Systems Maintenance,

Recommendation: Revise existing Section 4.4 as follows:

4.4 Cables, Cable Assemblies, and Conductors.

4.4.1 Physical Support.

4.4.1.1 Exposed cables and cable assemblies, including exposed knob-and-tube wiring, shall be supported as required to prevent physical damage to the cable or cable assembly.

4.4.1.2 Cables and cable assemblies entering panelboards, boxes, and devices shall be fastened and supported as required to ensure that stress is not transmitted to the conductors and termination(s).

4.4.2 Conductors and Cables

4.4.2.1 The conductor size shall be not less than the ampere rating of the circuit unless otherwise permitted for specific types of utilization equipment.

4.4.2.2 Except for older knob-and-tube wiring, single conductors that are not part of an approved cable or cable assembly shall be installed with an approved wiring method.

4.4.2.3 Splices and taps shall be made in an approved manner. Type AC cable and Type NM cable shall not be used in damp or wet locations.

4.4.2.4 Conductors, cables, and cable assemblies shall not show evidence of overheating or deterioration.

4.4.2.5 Conductors, cables, and cable assemblies shall not show evidence of fraying, damage, or physical abuse.

4.4.3 Conductor Terminations and Splices.

4.4.3.1 Conductors shall be terminated as required at panelboards, devices, and boxes so as to ensure a tight connection without damage to the connection or the conductors.

4.4.3.2 More than one conductor shall not be installed in any terminal unless identified or approved for such use.

4.4.3.3 Splices and taps shall be made in an approved box or enclosure, or other approved manner.

4.4.4 Grounded Conductors

4.4.4.1 An insulated grounded conductor of 6 AWG or smaller shall be identified by a continuous white or gray outer finish along its entire length.

4.4.4.2 No other conductors shall be identified by the color white or gray.

4.4.4.3 Except for frames of ranges, wall-mounted ovens, counter-mounted cooking units, and clothes dryers, grounded circuit conductors in branch circuits shall not be connected to non-current carrying metal parts.

4.4.5 Grounding Conductors

4.4.5.1 Equipment grounding conductors shall be permitted to be bare, covered, or insulated.

4.4.5.2 Individually covered or insulated equipment grounding conductors shall have a continuous outer finish that is either green or green with one or more yellow stripes.

4.4.5.3 No other conductors shall be identified by the color green or green with one or more yellow stripes.

Substantiation: This committee proposal is to editorially clarify Section 4.4 and to ensure that it complies with the NFPA Manual of Style.

Committee Meeting Action: Accept

Number Eligible to Vote: 15

Ballot Results: Affirmative: 13

Ballot Not Returned: 2 Mukherjee, S., Phillips, G.

73-21 Log #25 EFM-AAA **Final Action:** Accept in Principle
(4.4.X (New))

Submitter: David A. Dini, Underwriters Laboratories Inc.

Recommendation: Add new subsection under section 4.4 as follows:

“Grounded conductors shall be identified by a white or gray color. No other conductors shall be identified by the color white or gray. Equipment grounding conductors shall be bare or colored green or green with yellow stripes.”

Substantiation: This proposal was prepared by the NFPA 73 Residential Electrical System Aging Research Project Task Group. Task Group members consisted of Dave Dini (Chair), Tom Domitrovich, Doug Lee, and John Worsham. The Task Group was charged with reviewing the Technical Report dated July 1, 2008 of the Fire Protection Research Foundation’s (FPRF) Residential Electrical System Aging Research Project, and make recommendations for NFPA 73 based on the findings of that project.

In that study it was found that several of the older houses had grounded conductors not identified by a white or gray covering. Sec.200.6(A) of the National Electrical Code only permits a white or gray outer finish for grounded conductors. The study also found houses where equipment grounding conductors were not bare or green colored. Sec.250.119 of the National Electrical Code permits equipment grounding conductors to be bare, or with an outer finish that is green or green with yellow stripes. Misidentifying ground conductors or equipment grounding conductors with ungrounded conductors can cause a potential electric shock hazard.

Committee Meeting Action: Accept in Principle

Committee Statement: See the committee action and statement on Proposal 73-20 (Log CP2).

Number Eligible to Vote: 15

Ballot Results: Affirmative: 13

Ballot Not Returned: 2 Mukherjee, S., Phillips, G.

73-22 Log #26 EFM-AAA **Final Action:** Accept in Principle
(4.4.X (New))

Submitter: David A. Dini, Underwriters Laboratories Inc.

Recommendation: Add new subsection under section 4.4 as follows:

“Except for frames of ranges, wall-mounted ovens, counter-mounted cooking units, and clothes dryers, grounded circuit conductors shall not be connected to non-current carrying metal parts.”

Substantiation: This proposal was prepared by the NFPA 73 Residential Electrical System Aging Research Project Task Group. Task Group members consisted of Dave Dini (Chair), Tom Domitrovich, Doug Lee, and John Worsham. The Task Group was charged with reviewing the Technical Report dated July 1, 2008 of the Fire Protection Research Foundation’s (FPRF) Residential Electrical System Aging Research Project, and make recommendations for NFPA 73 based on the findings of that project.

In that study it was found that several of the older houses had a ground circuit conductor connected to a non-current carrying metal part. Sec. 250.24(A)(5) of the National Electrical Code does not permit a grounded circuit conductor to be connected to normally non-current carrying metal parts of equipment. An exception is Sec. 250.142(B) of the National Electrical Code, which permits frames of ranges, wall-mounted ovens, counter-mounted cooking units, and clothes dryers to be connected to the grounded circuit

conductor. Connecting the grounded circuit conductor to a normally non-current carrying metal part could cause a potential electric shock hazard.

Committee Meeting Action: Accept in Principle

Committee Statement: See the committee action and statement on Proposal 73-20, CP 2.

Number Eligible to Vote: 15

Ballot Results: Affirmative: 13

Ballot Not Returned: 2 Mukherjee, S., Phillips, G.

73-23 Log #27 EFM-AAA **Final Action: Accept in Principle (4.4.X (New))**

Submitter: David A. Dini, Underwriters Laboratories Inc.

Recommendation: Add new subsection under section 4.4 as follows:

“Except for older knob-and-tube wiring, single conductors that are not part of an approved cable or cable assembly shall be installed with an appropriate wiring method.”

Substantiation: This proposal was prepared by the NFPA 73 Residential Electrical System Aging Research Project Task Group. Task Group members consisted of Dave Dini (Chair), Tom Domitrovich, Doug Lee, and John Worsham. The Task Group was charged with reviewing the Technical Report dated July 1, 2008 of the Fire Protection Research Foundation’s (FPRF) Residential Electrical System Aging Research Project, and make recommendations for NFPA 73 based on the findings of that project.

In that study it was found that several of the older houses had conductors that were not installed using a recognized wiring method, such as electrical conduit or tubing. Sec. 300.3(A) of the National Electrical Code requires that single conductors be installed where part of a recognized wiring method. It is recognized that older knob-and-tube wiring systems did permit open wiring.

Committee Meeting Action: Accept in Principle

Committee Statement: See the committee action and statement on Proposal 73-20, CP 2.

Number Eligible to Vote: 15

Ballot Results: Affirmative: 13

Ballot Not Returned: 2 Mukherjee, S., Phillips, G.

Comment on Affirmative:

MANCHE, A.: NEMA supports the addition of the submitter’s proposed language. The review of a knob-and-tube installation should also consider contact with insulation as a fire hazard which is presently not addressed in this document.

The committee should consider the following language: “Concealed knob-and-tube wiring shall not be permitted to be used in hollow spaces of walls, ceilings, and attics where such spaces are insulated by loose, rolled, or foamed-in-place insulating material that envelops the conductors.”

73-24 Log #29 EFM-AAA **Final Action: Accept in Principle (4.4.X (New))**

Submitter: David A. Dini, Underwriters Laboratories Inc.

Recommendation: Add new subsection under section 4.4 as follows:

“Splices and taps shall be made in an appropriate box or enclosure, or other approved manner.”

Substantiation: This proposal was prepared by the NFPA 73 Residential Electrical System Aging Research Project Task Group. Task Group members consisted of Dave Dini (Chair), Tom Domitrovich, Doug Lee, and John Worsham. The Task Group was charged with reviewing the Technical Report dated July 1, 2008 of the Fire Protection Research Foundation’s (FPRF) Residential Electrical System Aging Research Project, and make recommendations for NFPA 73 based on the findings of that project.

In that study it was found that several of the older houses had open splices or taps. Sec. 300.15 of the National Electrical Code requires that a box or conduit body be installed for each conductor splice or outlet point. Open splices can be a potential electric shock or fire hazard.

Committee Meeting Action: Accept in Principle

Committee Statement: See the committee action and statement on Proposal 73-20 (Log CP2).

Number Eligible to Vote: 15

Ballot Results: Affirmative: 13

Ballot Not Returned: 2 Mukherjee, S., Phillips, G.

73-25 Log #30 EFM-AAA **Final Action: Accept in Principle (4.4.X (New))**

Submitter: David A. Dini, Underwriters Laboratories Inc.

Recommendation: Add new subsection under section 4.4 as follows:

“Type AC cable and Type NM cable shall not be used in damp or wet locations.”

Substantiation: This proposal was prepared by the NFPA 73 Residential Electrical System Aging Research Project Task Group. Task Group members consisted of Dave Dini (Chair), Tom Domitrovich, Doug Lee, and John Worsham. The Task Group was charged with reviewing the Technical Report dated July 1, 2008 of the Fire Protection Research Foundation’s (FPRF) Residential Electrical System Aging Research Project, and make recommendations for NFPA 73 based on the findings of that project.

In that study it was found that several of the older houses had used Type AC cable or Type NM cable in a damp or wet location. Sec. 320.12 of the National Electrical Code does not permit Type AC cable to be used in a damp or wet location. Sec. 334.12(B)(4) of the National Electrical Code does not permit Type NM cable to be used in a damp or wet location. Using Type AC cable or Type NM cable in a damp or wet location can be a potential electric shock or fire hazard.

Committee Meeting Action: Accept in Principle

Committee Statement: See the committee action and statement on Proposal 73-20 (Log CP2).

Number Eligible to Vote: 15

Ballot Results: Affirmative: 13

Ballot Not Returned: 2 Mukherjee, S., Phillips, G.

73-26 Log #31 EFM-AAA **Final Action: Accept in Principle (4.4.1)**

Submitter: David A. Dini, Underwriters Laboratories Inc.

Recommendation: Revise subsection 4.4.1 as follows:

“Exposed cables and cable assemblies, including exposed knob-and-tube wiring, shall be supported as required to prevent physical damage to the cable or cable assembly.”

Substantiation: This proposal was prepared by the NFPA 73 Residential Electrical System Aging Research Project Task Group. Task Group members consisted of Dave Dini (Chair), Tom Domitrovich, Doug Lee, and John Worsham. The Task Group was charged with reviewing the Technical Report dated July 1, 2008 of the Fire Protection Research Foundation’s (FPRF) Residential Electrical System Aging Research Project, and make recommendations for NFPA 73 based on the findings of that project.

In that study it was found that several of the older houses had knob-and-tube wiring installed in attics that was not secured or supported in place. Sec. 394.30 of the National Electrical Code requires appropriate securing and supporting of knob-and-tube wiring. Wiring that is not properly supported or secured can be the cause of a potential electrical shock or fire hazard.

Committee Meeting Action: Accept in Principle

Committee Statement: See the committee action and statement on Proposal 73-20 (Log CP2).

Number Eligible to Vote: 15

Ballot Results: Affirmative: 13

Ballot Not Returned: 2 Mukherjee, S., Phillips, G.

73-27 Log #24 EFM-AAA **Final Action: Accept in Principle (4.4.3)**

Submitter: David A. Dini, Underwriters Laboratories Inc.

Recommendation: Revise subsection 4.4.3 as follows:

“Conductors shall be terminated as required at panelboards, devices, and boxes so as to ensure a tight connection without damage to the connection or the conductors. More than one conductor shall not be installed in any terminal unless identified or approved for such use.”

Substantiation: This proposal was prepared by the NFPA 73 Residential Electrical System Aging Research Project Task Group. Task Group members consisted of Dave Dini (Chair), Tom Domitrovich, Doug Lee, and John Worsham. The Task Group was charged with reviewing the Technical Report dated July 1, 2008 of the Fire Protection Research Foundation’s (FPRF) Residential Electrical System Aging Research Project, and make recommendations for NFPA 73 based on the findings of that project.

In that study it was found that several of the older houses had more than one wire installed in a terminal not identified for such use. Sec. 110.14(A) of the National Electrical Code requires that terminals for more than one conductor be so identified. Installing more conductors than the terminal was designed and tested for could cause a potential fire hazard.

Committee Meeting Action: Accept in Principle

Committee Statement: See the committee action and statement on Proposal 73-20 (Log CP2).

Number Eligible to Vote: 15

Ballot Results: Affirmative: 13

Ballot Not Returned: 2 Mukherjee, S., Phillips, G.

73-28 Log #CP3 EFM-AAA **Final Action: Accept (4.7)**

Submitter: Technical Committee on Electrical Systems Maintenance,

Recommendation: In the existing Code text, in Section 4.7 retain the wording “(lighting fixture)”.

In the remainder of the section, remove “(lighting fixture)”.

Substantiation: This is an editorial revision to provide consistency with the language in the NEC, and to provide guidance for inspectors when working in older buildings.

Committee Meeting Action: Accept

Number Eligible to Vote: 15

Ballot Results: Affirmative: 13

Ballot Not Returned: 2 Mukherjee, S., Phillips, G.

73-29 Log #23 EFM-AAA **Final Action: Accept**
(4.7.X (New))

Submitter: David A. Dini, Underwriters Laboratories Inc.

Recommendation: Add new subsection under section 4.7 as follows:

“Luminaires marked with a minimum supply wire temperature rating shall not be installed with supply wiring having a lower temperature rating.”

Substantiation: This proposal was prepared by the NFPA 73 Residential Electrical System Aging Research Project Task Group. Task Group members consisted of Dave Dini (Chair), Tom Domitrovich, Doug Lee, and John Worsham. The Task Group was charged with reviewing the Technical Report dated July 1, 2008 of the Fire Protection Research Foundation’s (FPRF) Residential Electrical System Aging Research Project, and make recommendations for NFPA 73 based on the findings of that project.

In that study it was found that several of the older houses had installed luminaires that were marked for a supply wire temperature rating of greater than the branch circuit wiring rating. This could create a potential fire hazard. Sec. 110.3(B) of the National Electrical Code requires that listed or labeled equipment be installed and used in accordance with any instructions included in the listing or labeling.

Committee Meeting Action: Accept

Number Eligible to Vote: 15

Ballot Results: Affirmative: 13

Ballot Not Returned: 2 Mukherjee, S., Phillips, G.

73-30 Log #32 EFM-AAA **Final Action: Accept**
(4.7.X(New))

Submitter: David A. Dini, Underwriters Laboratories Inc.

Recommendation: Add new subsection under section 4.7 as follows:

“Recessed luminaires not intended for contact with insulation shall not be installed within 13 mm (1/2 in.) of combustible materials or within 75 mm (3 in.) of thermal insulation.”

Substantiation: This proposal was prepared by the NFPA 73 Residential Electrical System Aging Research Project Task Group. Task Group members consisted of Dave Dini (Chair), Tom Domitrovich, Doug Lee, and John Worsham. The Task Group was charged with reviewing the Technical Report dated July 1, 2008 of the Fire Protection Research Foundation’s (FPRF) Residential Electrical System Aging Research Project, and make recommendations for NFPA 73 based on the findings of that project.

In that study it was found that several of the older houses had recessed luminaires that were secured to combustible materials and/or surrounded with thermal insulation, and not intended for such use. Section 410.116(A) of the National Electrical Code only permits recessed luminaires that are identified for contact with insulation to be in contact with combustible materials or to have thermal insulation within 3 inches of the luminaire. Luminaires that are not tested and identified for contact with insulation can be the cause of a potential fire hazard if they come in contact with thermal insulation or combustible materials.

Committee Meeting Action: Accept

Number Eligible to Vote: 15

Ballot Results: Affirmative: 13

Ballot Not Returned: 2 Mukherjee, S., Phillips, G.

73-31 Log #34 EFM-AAA **Final Action: Accept**
(4.7.X (New))

Submitter: David A. Dini, Underwriters Laboratories Inc.

Recommendation: Add the following subsection under section 4.7:

“Luminaires installed in wet locations shall be identified for use in wet locations.”

Substantiation: This proposal was prepared by the NFPA 73 Residential Electrical System Aging Research Project Task Group. Task Group members consisted of Dave Dini (Chair), Tom Domitrovich, Doug Lee, and John Worsham. The Task Group was charged with reviewing the Technical Report dated July 1, 2008 of the Fire Protection Research Foundation’s (FPRF) Residential Electrical System Aging Research Project, and make recommendations for NFPA 73 based on the findings of that project.

In that study it was found that several of the older houses had boxes, enclosures, and luminaires installed outdoors that were not identified for use in wet locations. Section 4.8.2 addresses boxes and enclosures installed in wet locations. Electrical devices, including luminaires, installed in wet locations that are not tested and identified as being suitable for that use can become a potential electrical shock or fire hazard.

Committee Meeting Action: Accept

Number Eligible to Vote: 15

Ballot Results: Affirmative: 13

Ballot Not Returned: 2 Mukherjee, S., Phillips, G.

73-32 Log #11 EFM-AAA **Final Action: Accept in Principle**
(4.7.5)

Submitter: Merton W. Bunker, Jr., US Department of State

Recommendation: Revise 4.7.5 to read as follows:

“4.7.5 Polarization of Luminaires (Fixtures).

4.7.5.1 Luminaires (fixtures) shall be wired so that the screw shells of lampholders are connected to the same luminaire (fixture) or circuit conductor or terminal.

4.7.5.2 The grounded conductor, where connected to a screw-shell lampholder, shall be connected to the screw shell.”

Substantiation: This proposal contains no technical changes. It is solely intended to provide compliance with the NFPA Manual of Style.

Committee Meeting Action: Accept in Principle

Committee Statement: See the committee action and statement on Proposal 73-28 (Log CP3).

By the action on Proposal 73-28 (Log CP3), it is understood that all 3 instances of “(fixture)” or “(fixtures)” are to be deleted.

Number Eligible to Vote: 15

Ballot Results: Affirmative: 13

Ballot Not Returned: 2 Mukherjee, S., Phillips, G.

73-33 Log #28 EFM-AAA **Final Action: Accept**
(4.8.1)

Submitter: David A. Dini, Underwriters Laboratories Inc.

Recommendation: Revise subsection 4.8.1 as follows:

“Boxes and covers shall be fastened in place.”

Substantiation: This proposal was prepared by the NFPA 73 Residential Electrical System Aging Research Project Task Group. Task Group members consisted of Dave Dini (Chair), Tom Domitrovich, Doug Lee, and John Worsham. The Task Group was charged with reviewing the Technical Report dated July 1, 2008 of the Fire Protection Research Foundation’s (FPRF) Residential Electrical System Aging Research Project, and make recommendations for NFPA 73 based on the findings of that project.

In that study it was found that several of the older houses had boxes that were not fastened in place. Sec. 300.11(A) of the National Electrical Code requires that boxes be securely fastened in place. Boxes that are not securely fastened in place can become a potential electric shock or fire hazard.

Committee Meeting Action: Accept

Number Eligible to Vote: 15

Ballot Results: Affirmative: 13

Ballot Not Returned: 2 Mukherjee, S., Phillips, G.

73-34 Log #35 EFM-AAA **Final Action: Accept**
(4.8.2)

Submitter: David A. Dini, Underwriters Laboratories Inc.

Recommendation: Revise subsection 4.8.2 as follows:

“Boxes, covers, and enclosures installed in wet locations shall be identified for use in wet locations. Where boxes, covers, or enclosures are equipped with a gasket or other means to seal an opening and prevent water from entering, the gasket or other means shall not have deteriorated to jeopardize the integrity of the seal.”

Substantiation: This proposal was prepared by the NFPA 73 Residential Electrical System Aging Research Project Task Group. Task Group members consisted of Dave Dini (Chair), Tom Domitrovich, Doug Lee, and John Worsham. The Task Group was charged with reviewing the Technical Report dated July 1, 2008 of the Fire Protection Research Foundation’s (FPRF) Residential Electrical System Aging Research Project, and make recommendations for NFPA 73 based on the findings of that project.

In that study it was found that several of the older houses had boxes or enclosures installed outdoors that were not properly sealed or closed from the outdoor elements. Water and other elements that could penetrate into an outdoor box or enclosure could cause a potential electric shock or fire hazard.

Committee Meeting Action: Accept

Number Eligible to Vote: 15

Ballot Results: Affirmative: 13

Ballot Not Returned: 2 Mukherjee, S., Phillips, G.

73-35 Log #12 EFM-AAA **Final Action: Accept**
(4.9.7)

Submitter: Merton W. Bunker, Jr., US Department of State

Recommendation: Revise 4.9.7 to read as follows:

4.9.7* Receptacle wiring shall comply with all of the following:

4.9.7.1 Testing.

4.9.7.1.1 Receptacles shall have correct wiring when tested with a listed receptacle tester.

4.9.7.1.2 The tester shall provide indications when branch circuit conductors are not connected to the intended terminals on the receptacle.

4.9.7.2 Where receptacles and branch-circuit conductors are identified for polarization, receptacles shall be correctly polarized.

4.9.7.3 All grounding-type receptacles shall be grounded or shall have ground-fault circuit-interrupter protection where installed on a circuit that does not have an equipment grounding conductor.

Substantiation: This proposal contains no technical changes. It is solely intended to provide compliance with the NFPA Manual of Style.

Committee Meeting Action: Accept

Number Eligible to Vote: 15

Ballot Results: Affirmative: 13

Ballot Not Returned: 2 Mukherjee, S., Phillips, G.

73-36 Log #33 EFM-AAA **Final Action: Accept in Principle (5.1)**

Submitter: David A. Dini, Underwriters Laboratories Inc.

Recommendation: Revise section 5.1 as follows:

Ground-Fault Circuit Interrupters. Where ground-fault circuit interrupters are installed, they shall operate correctly when tested with their integral test function. For a receptacle type ground-fault circuit interrupter, this includes determining that the outlet is deenergized when the integral test function is performed, and then reenergized when the reset function is performed. This will assure that the receptacle is properly wired “line” and “load.”

Substantiation: This proposal was prepared by the NFPA 73 Residential Electrical System Aging Research Project Task Group. Task Group members consisted of Dave Dini (Chair), Tom Domitrovich, Doug Lee, and John Worsham. The Task Group was charged with reviewing the Technical Report dated July 1, 2008 of the Fire Protection Research Foundation’s (FPRF) Residential Electrical System Aging Research Project, and make recommendations for NFPA 73 based on the findings of that project.

In that study it was found that several of the older houses had GFCIs that were non-operational, and in some cases receptacle GFCIs that were not properly wired “line” and “load.” GFCIs that are not properly wired “line” and “load” will not provide proper ground-fault protection. Determining that the receptacle is properly deenergized when performing the integral test function will assure that the GFCI is wired properly.

Committee Meeting Action: Accept in Principle

Revise the proposed wording to read as follows:

“5.1 “Ground-Fault Circuit Interrupters.

5.1.1 Where ground-fault circuit interrupters are installed, they shall operate correctly when tested with their integral test function.

5.1.2 For a receptacle type ground-fault circuit interrupter, this shall include determining that the outlet is deenergized when the integral test function is performed, and then reenergized when the reset function is performed.”

Committee Statement: The revised wording clarifies the intent of the section and complies with the NFPA Manual of Style.

Number Eligible to Vote: 15

Ballot Results: Affirmative: 13

Ballot Not Returned: 2 Mukherjee, S., Phillips, G.

Comment on Affirmative:

MANCHE, A.: NEMA supports the addition of the submitter’s proposed language. The addition of a table that clarifies when and where GFCIs and AFCIs were installed based on the NEC being used during the construction of the home would further benefit which locations should have GFCIs and AFCI installed based on the age of the home.

(See the “NEC Protection Requirements for GFCIs and AFCIs” on Page 10.)

73-37 Log #3 EFM-AAA **Final Action: Reject (5.2 and A.5.2)**

Submitter: Jon Nisja, Northcentral Regional Fire Code Development Committee

Recommendation: Revise text to read as follows:

5.2* Smoke Alarms. Where smoke alarms are installed, they shall operate correctly when tested with their integral test function.

A.5.2 The inspector should recommend that smoke alarms be installed in instances where none are present.

Substantiation: Home fires have the largest life loss and inspectors performing inspections should inform those not protected by smoke alarms that it is important to install and maintain them.

Committee Meeting Action: Reject

Committee Statement: The proposed annex information does not indicate where the smoke alarms should be installed.

In addition, the installation of smoke alarms is not covered under the scope of this document.

The committee refers the submitter to NFPA 72, *National Fire Alarm Code*.

Number Eligible to Vote: 15

Ballot Results: Affirmative: 12 Negative: 1

Ballot Not Returned: 2 Mukherjee, S., Phillips, G.

Explanation of Negative:

VAN DEN HEUVEL, J.: I feel that any smoke alarm regardless of where it is located provides a safer environment.

73-38 Log #13 EFM-AAA **Final Action: Accept in Principle (A.3.3.12)**

Submitter: Bob Eugene, Underwriters Laboratories Inc.

Recommendation: Revise text as follows:

A.3.3.12 Ground-Fault Circuit Interrupter (GFCI). Class A ground-fault circuit interrupters trip when the current to ground has a value in the range of 4 mA to 6 mA. For further information, see ANSI/UL 943, Standard for Ground-Fault Circuit Interrupters.

Substantiation: The ANSI designation should be added to UL 943 to reflect the ANSI approval of the referenced standard.

Committee Meeting Action: Accept in Principle

Committee Statement: See the committee action on Proposal 73-6 (Log 17). The definition of “ground-fault circuit interrupter” is being extracted from the NEC (NFPA 70).

Number Eligible to Vote: 15

Ballot Results: Affirmative: 13

Ballot Not Returned: 2 Mukherjee, S., Phillips, G.

73-39 Log #14 EFM-AAA **Final Action: Accept (C.1.2.1)**

Submitter: Bob Eugene, Underwriters Laboratories Inc.

Recommendation: Revise text as follows:

C.1.2.1 UL Publication. Underwriters Laboratories Inc., 333 Pflugsten Road, Northbrook, IL 60062-2096.

ANSI/UL 943, Standard for Ground-Fault Circuit Interrupters, 2003 2006, revised 2008.

Substantiation: Update referenced standard to most current revision. Add ANSI designation for referenced standard that meet the ANSI approval procedures.

Committee Meeting Action: Accept

Number Eligible to Vote: 15

Ballot Results: Affirmative: 13

Ballot Not Returned: 2 Mukherjee, S., Phillips, G.

NEC Protection Requirements for GFCI and AFCI

		National Electrical Code Requirement														
Protection	Area	Description	1962	1965	1968	1971	1975	1978	1981	1987	1990	1993	1996	2002	2005	2008
GFCI	Bathroom	Bathroom receptacles					210.8(A)	210-8(a)(1)	210-8(a)(1)	210-8(a)(1)	210-8(a)(1)	210-8(a)(1)	210-8(a)(1)	210-8(a)(1)	210-8(a)(1)	210-8(a)(1)
	Garage	Garage receptacles					210.8(A)	210-8(a)(1)	210-8(a)(2)	210-8(a)(2)	210-8(a)(2)	210-8(a)(2)	210-8(a)(2)	210-8(a)(2)	210-8(a)(2)	210-8(a)(2)
	Outdoor	Outdoor receptacles					210.8(A)	210-8(a)(2)	210-8(a)(3)	210-8(a)(3)	210-8(a)(3)	210-8(a)(3)	210-8(a)(3)	210-8(a)(3)	210-8(a)(3)	210-8(a)(3)
	Basement	Basement Receptacle Requirements					210.8(A)	210-8(a)(4)	210-8(a)(4)	210-8(a)(4)	210-8(a)(4)	210-8(a)(4)	210-8(a)(4)	210-8(a)(4)	210-8(a)(4)	210-8(a)(4)
	Crawl Spaces	receptacles at or below grade level														
	Unfinished basements	receptacles in Unfinished Basements														
	Kitchen Sinks	receptacles near a kitchen sink														
	Wet Bar Sinks	receptacles near wet bar sinks														
	Boathouses	receptacles installed in boathouses														
	Temporary Wiring	Receptacles not a part of the permanent wiring					210.8(B)	210-8(b)	210-8(b)	210-8(b)	210-8(b)	210-8(b)	210-8(b)	210-8(b)	210-8(b)	210-8(b)
	Swimming Pools	Swimming pool Underwater lighting					680-20(a)(1)	680-20(a)(1)	680-20(a)(1)	680-20(a)(1)	680-20(a)(1)	680-20(a)(1)	680-20(a)(1)	680-20(a)(1)	680-20(a)(1)	680-20(a)(1)
	Swimming Pools	Receptacles near swimming pools					680-6(a)	680-6(a)(3)	680-6(a)(3)	680-6(a)(3)	680-6(a)(3)	680-6(a)(3)	680-6(a)(3)	680-6(a)(3)	680-6(a)(3)	680-6(a)(3)
	Swimming Pools	Lighting fixtures and lighting outlets near a swimming pool					680-6	680-6(b)(2)	680-6(b)(2)	680-6(b)(2)	680-6(b)(2)	680-6(b)(2)	680-6(b)(2)	680-6(b)(2)	680-6(b)(2)	680-6(b)(2)
	Swimming Pools	All electric equipment, including power supply cords, used with storable swimming pools					680.31	680.31	680.31	680.31	680.31	680.31	680.31	680.31	680.31	680.31
	Swimming Pools	Cord connected pool filter pumps														
	Swimming Pools	Outlet supplying pool pump motors														
	Fountains	branch circuits supplying fountain equipment														
	Spas and Hot Tubs	Outdoor installations - Receptacles near the inside walls of a pool					680-41(a)	680-41(a)	680-41(a)	680-41(a)	680-41(a)	680-41(a)	680-41(a)	680-41(a)	680-41(a)	680-41(a)
	Spas and Hot Tubs	Outdoor installations - nearby Lighting fixtures and lighting outlets														
	Spas and Hot Tubs	Indoor installations - Receptacles located near the inside walls of a spa or hot tub														
Spas and Hot Tubs	Indoor installations - receptacles that provide power for a spa or hot tub															
AFCI	Bedrooms	Bedroom outlets														
	Family Rooms	Family room outlets														
	Dining Rooms	Dining room outlets														
	Living Rooms	living room outlets														
	Parlors	Parlor outlets														
	Libraries	Library outlets														
	Dens	Den outlets														
	Sumrooms	Sumroom outlets														
	Recreation Rooms	Recreation room outlets														
	Closets	Closet outlets														
	Hallways	Hallway outlets														