Report of the Committee on National Electrical Code

Correlating Committee

R. G. Biermann, *Chairman*
Biermann Electric Co. Inc., IA

Mark W. Earley, *Nonvoting Secretary*
National Fire Protection Association, Ma

Jean A. O'Connor, *Nonvoting Recording Secretary*
National Fire Protection Association, MA

Melvin J. Anna, Bell Communications Research, NJ
M. F. Borleis, Baltimore Gas & Electric, MD
Milton E. Cox, Underwriters Laboratories Inc., IL
Dale R. Deming, Am Electric Co. (T&B), PA
William R. Drake, Marinco, CA
Kenneth R. Edwards, IBEW, DC
Joseph E. Pipkin, U.S. Dept. of Labor OSHA, DC
J. Phillip Simmons, Int'l. Assn. of Electrical Inspectors, TX
Jay A. Stewart, Jay Stewart Assn. Inc., MI
Wilford I. Summers, Colorado Springs, CO

Alternates

Clyde H. Craig, Craig Electric Co., OH
(Alt. to R. G. Biermann)
Paul Duks, Underwriters Laboratories Inc., IL
(Alt. to M. E. Cox)
Earl W. Roberts, REPTEC, CT
(Alt. to D. R. Deming)
Joseph A. Tedesco, Int'l Assn. of Electrical Inspectors, TX
(Alt. to J. P. Simmons)
John W. Troglia, Wisconsin Electric Power Co., WI
(Alt. to M. F. Borleis)
John P. Widener, IBEW, DC
(Alt. to K. R. Edwards)

Technical Committee on

Electrical Systems Maintenance

Clyde H. Craig, *Chairman*
Craig Electric Co., OH

Donald A. Nissen, *Secretary*
Underwriters Laboratories, Inc., IL

M. F. Borleis, Baltimore Gas & Electric, MD
Rep. Electric Light Power Group/Edison Electric Institute
L. L. Bule, Pettit & Pettit Consulting Engineers, Inc., AR
Arthur Buxbaum, San Diego Building Inspection Dept., CA
Morton H. Lerner, Engineering Consultants, PA
Anthony Montuori, The New York Board of Fire Underwriters, NY
Henry Omson, U.S. Department of Housing & Urban Development, DC
Anthony V. Sauro, Johnston, RI
William E. Slater, RACO Inc., IN
Dan Smits, AmeriSpec Home Insp - Pro Tech, IL
H. Brooke Stauffer, SMART HOUSE Limited Partnership, MD
Rep. National Association of Home Builders
Robert A. Stead, R A Stead, Inc Building Inspections Services, MA
Rep. American Society of Home Inspectors
Jack Wells, Pass & Seymour/Legrand, NY
Rep. National Electrical Manufacturers Association
James H. Worden, City of Port Huron, MI
Rep. International Association of Electrical Inspectors

Alternates

James R. Dowling, Natl Assn of Home Builders, DC
(Alt. to H. B. Stauffer)
Bill Worthing, National Electrical Manufacturing Association, CA
(Alt. to J. Wells)

Nonvoting

Dennis McCoskrie, U.S. Consumer Products Safety Commission, MD

NFPA Staff Liaison: **Richard H. Murray**

This list represents 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.

Committee Scope: This Committee shall have primary responsibility for documents on the maintenance of electrical systems in existing one- and two-family dwellings. The Committee reports to the Association through the National Electrical Code Correlating Committee.

The Electrical Systems Maintenance Committee proposes for adoption its Report on amendments to the draft of NPFA 73, Residential Electrical Maintenance Code. This is a proposed new standard.

This Report has been submitted to letter ballot of the Committee on Electrical Systems Maintenance which consists of 15 members of whom all members returned a ballot.The results of the voting are shown afer each proposal.

This Report has also been submitted to letter ballot of the Correlating Committee which consists of 11 voting members. of which all members returned ballots. The ballot was unanimously affirmative with the exception of the following:

Negatives:

Mr. Simmons:

73-17
The addition of the proposal would make the scope clearer and should have been accepted or the text incorporated into the body of Section 1-2.1.

Section 1-2.1 needs to be written so three notes explaining what is meant by the rule are not necessary. Notes such as these are often an admission that the section itself is unclear.

73-21
NFPA-73 can neither amend nor modify the National Electrical Code. Perhaps the appropriate words are "except as provided for in this code."

73-41
I disagree that the submitter's concerns were addressed in Proposal 73-48. Proposal 73-41 gives specific clearance requirements. Proposal 73-48 uses the term "adequate clearances" which is vague, not defined and renders Section 2-2.3 unenforceable.

This points out a major flaw in the document. The words "adequate", "excessive", and "properly" (or a variation thereof) are used at least 23 times in this small document. Most all the sections where these words are used are difficult or impossible to enforce due to the subjective and widely differing interpretations of these words.

73-42
This proposal offers such a basic safety requirement, it is difficult to fault it. The rejection of this proposal creates two levels of safety, one for new installations through the NEC and another lower standard through NFPA-73.

73-43
Same as 73-42

73-44
The rejection of this proposal creates two levels of safety, one for new installations through the NEC and another lower standard through NFPA 73.

73-45
The use of the word "adequate" without reference to the load calculation requirements in Article 220 of the NEC makes this section unenforceable.

73-55
The accepted language without reference to Article 250 in the NEC is far too subjective and is unenforceable.

73-57
The Committee Statement is inadequate in that it does not address the substantiation but simply refers to the proposal where the undefined term is used.

73-62
The submitter provided specific language. The reworded language is vague and unenforceable.

73-71
Same as 73-62

73-79
The language is vague and unenforceable.

73-80
I disagree with the panel statement. Specific distances are enforceable. The present language will allow 1/4 inch (or less) clearance from an open incandescent lamp to combustible material, a clear violation of Section 410-8 of the NEC and an obvious lower standard.

73-82
NFPA 70 in Section 410-8 has prohibited open incandescent lamps in clothes closets as a safety hazard. The panel action creates two levels of safety, one for new installations through the NEC and another lower standard through NFPA 73.

73-87
The proposal addresses a common safety problem NFPA 73 is intended to cover. The reference to Proposal 73-42 seems inappropriate.

73-88
Same as 73-87

73-94
The Committee Statement is incorrect in that the proposal is not more restrictive than Section 250-50 of the NEC but adds additional requirements which from a safety perspective make sense.

Comments on Vote:

Mr. Biermann
The NEC Correlating Committee's responsibility is to review the activities of the NFPA 73 Committee to assure that its actions are in compliance with the Regulations Governing Committee Projects, and a 3/4 vote in the affirmative will release the report for publication. The Nov. 13, 1992 memorandum of the ballot results could be interpreted as 12 affirmative, 3 negative on the report as a whole because of negative ballots on only portions of the report. This, of course, would be permitted under the regulations if the 73 Committee elected to present its report in that manner. However, I believe it is the Correlating Committee's wish that the 73 ballots and actions be on a proposal by proposal and comment by comment basis, as per the NEC process. In that case, I would assume that the 73 committee is unanimous in its vote to release the report with the negative votes and comments only relating to the proposals in question.

73-1
Mr. Drake: This comment should be brought to the attention of the Standards Council

Mr. Simmons: One reason the Standards Council has been reluctant to naming the document the "Residential Electrical Reinspection Code" or similar, is their concern that two NFPA documents do not contain different levels of minimum safety, one for new and another lower one for existing electrical systems.

73-9 through 73-18
Mr. Drake: The scope of the document is under the jurisdiction of the Standards Council.
Note: These comments should be brought to the attention of the Standards Council

Mr. Stewart: Scope issues are the responsibility of Correlating Committee. I agree with Technical Committee Actions

73-22
Mr. Simmons: The Committee should refer to the action on 73-21 rather than to 73-20 which then refers to 73-21.

73-24
Mr. Stewart: Identify extracted material (*) such as definitions

Mr. Simmons: Since many of the definitions are extracted from the NEC, the NFPA policy on extracted material must be complied with. In addition, the definitions should be alphabetized.

73-25
Mr. Stewart: Identify extracted material (*) such as definitions.

73-39
Mr. Stewart: Correct Technical Committee action from "reject" to "accept".

73-52
Mr. Edwards: I feel the panel did not give the proposer sufficient reasoning for rejecting the proposal. In most cases, it is not the original installation that is in trouble. It is what has been added to the original installation that could be a fire or safety hazard.

73-64
Mr. Edwards: Same as 73-52

73-65
Mr. Edwards: Same as 73-52

73-89
Mr. Stewart: Change "should" to "shall"

73-92
Mr. Edwards: Same as 73-52

73-93
Mr. Edwards: Same as 73-52

(Log # 111)

73- 1 - (Title): Reject
SUBMITTER: Saul Rosenbaum, Little Neck, NY
RECOMMENDATION: Revise title:
On the first page of the proposed draft, this document is titled, "Residential Electrical Maintenance Code." On the second page of the draft, this document is referred to as, "
Residential Electrical Reinspection Code."
SUBSTANTIATION: I think that the title would be much more descriptive if it were, indeed, titled "Residential Electrical Reinspection Code."
COMMITTEE ACTION: Reject.
COMMITTEE STATEMENT: The name of the document is under the jurisdiction of the Standards Council.
VOTE ON COMMITTEE ACTION:
AFFIRMATIVE: 14
NEGATIVE: Wells
EXPLANATION OF VOTE:
WELLS: The title of this new document will be important to it's adoption and understanding. The Standards Council's past reluctance to title this a "Reinspection" document as recommended by the submitter is understandable for it presumes a prior inspection. However, neither is the document a "maintenance" Code. It is recommended that the Technical Committee propose the following title to the Standards Council for consideration "Residential Electrical Safety Evaluation Code for Existing Dwellings."
This title appropriately describes the document. While it is broader than the scope of the current draft it will permit expansion through a scope change without changing the title.

(Log # 70)

73- 2 - (General): Reject
SUBMITTER: Brian E. Rock, Hubbell, Inc.
RECOMMENDATION: Revise text:
General review for retroactivity problems and appropriate revision of the complete text.
SUBSTANTIATION: Retroactivity of newer NEC"(NFPA 70) requirements in the absence of unsafe deterioration is contrary to purpose of this Reinspection Code and to the charge given to the NFPA 73 Committee. In a number of instances, the Reinspection Code Draft retroactively mandates minimum requirements from later issues of the NEC" that would force otherwise safe, older installations to upgrade their installation. Section 2-2.1, for instance, mandates a minimum of 60 ampere, 120/240 volt, 3-wire service; many older residences in New York City, however, have 40 ampere, 120 volt, 2-wire service. Other examples exist throughout the Draft.
COMMITTEE ACTION: Reject.
COMMITTEE STATEMENT: The submitter did not provide a specific recommendation as to section and text for the Committee to review. Section 10-10(d) of the NFPA Regulations Governing Committee Projects requires that "the proposed text of the Proposal, including the wording to be added, revised (and how revised), or deleted" be included in the Proposal.
VOTE ON COMMITTEE ACTION: Unanimously Affirmative.

(Log # 71)

73- 3 - (General): Reject
SUBMITTER: Brian E. Rock, Hubbell, Inc.
RECOMMENDATION: Revise text:
General review for interpretability problems and appropriate revision of the complete text.
SUBSTANTIATION: The charge given to the NFPA 73 Committee is to write a residential electrical reinspection code targeted to the existing home inspection enforcement groups, i.e., the professional engineers and home inspectors presently conducting structural, insect, radon, etc., inspections on behalf of the mortgage companies or their guarantors (secondary mortgage market). These individuals are typically not familiar with NEC" (NFPA 70) phraseology or interpretations of NEC" (NFPA 70) requirements. Much of the Reinspection Code Draft, however, has been crafted in language familiar to trained electrical inspectors who address new construction and are part of the Certificate of Occupancy process.
Furthermore, some of the Reinspection Code Draft requirements use vague or undefined terms. Section 2-2.3 requires a judgment call as to "excessive insulation deterioration" and Section 2-11.8 requires these individuals to determine if receptacles have "acceptable blade retention." What are "excessive" or "acceptable" levels? This target enforcement group must be provided with definitive requirements, not subject to changeable interpretations or subjective judgments.
COMMITTEE ACTION: Reject.
COMMITTEE STATEMENT: The Committee intends this standard to be enforced by individuals who are familiar with and knowledgeable about the NEC. While the Committee will endeavor to provide definitive requirements where possible, Section 1-3.1 places responsibility for interpretation with the Authority Having Jurisdiction.
The submitter did not provide a specific recommendation as to section and text for the Committee to review. Section 10-10(d) of the NFPA Regulations Governing Committee Projects requires that "the proposed text of the Proposal, including the wording to be added, revised (and how revised), or deleted" be included in the Proposal.
VOTE ON COMMITTEE ACTION: Unanimously Affirmative.

(Log # 101)

73- 4 - (All): Reject
SUBMITTER: Frederick W. Dillemuth, Jacksonville, NC
RECOMMENDATION: Delete entire proposal.
SUBSTANTIATION: "Having reviewed NFPA 73 (Residential Electrical Maintenance Code) I find myself dismayed at the fact that we have reached a point in time, where we feel we must "mandate" regulations which require the "Authority Having Jurisdiction" to enter our homes to conduct electrical REINSPECTIONS. First, I find this extremely distasteful and somewhat akin to unlawful search and seizure procedures used by third world countries. It reminds me of accounts I've read of the Gestapo kicking in doors at three a.m. What next. . .".
A myriad of protests immediately came to mind after having read NFPA 73. But first, among many, was the idea that "big brother" was at it again. Are we to believe that residential reinspection is the answer to electrical safety? To believe that, is to believe that banning guns will do away with criminals! My intent is not to embark on a political discourse, but instead, to attempt to dissuade the committee from pursuing this endeavor. I see it as an exercise in futility and, if adopted as state law or stature, as making criminals out of basically honest people.
The second thought that came to mind was that this is an ideal way to increase the profitability of an economically depressed trade. I would be foolish to think that anyone who twists wires for a living does so out of sheer joy for the trade. Profitability is the ultimate reason for doing business in any trade and there is nothing wrong with that. But to mandate it?
Some States will adopt NFPA 73 out of hand, simply because it was mandated from on high. There will be no thought given to the repercussion such regulations will have down the road. When that Code reaches County and City level, it will create some real problems for a lot of common folks.
Money, or the lack of it is the basis for my protest with regard to NFPA 73. While NFPA 73, in theory, may be a nobel and admirable idea, in practice it will open a can of worms. A very large can, indeed.
Imagine, if you will, an electrical inspector arrives at your residence, NEC in hand, and announces that he is mandated to reinspect your residence. Required by law, mind you. And anything he finds wrong, with regard to NFPA 73, you will be required to repair/replace within 30 days or he will have the power turned off. I can well imagine some overzealous inspectors may even require repair within 7 days. Some people just can't handle authority. And God help you if that inspector doesn't like you. Or if he does, he might not even inspect your property. If your a landlord with lots of rental properties, you might even be able to "buy" an inspector cheaper than you could fix up you slum apartments.
I am an electrical contractor whose mainstay is residential repair and maintenance. I have served the people of this county for the past 12 years. In those years I have come to realize that this is basically a farming community. Recent reports indicate that Union scale wages in NY are $48.00 per hr. Thats $384.00 per day. In this neck of the woods it would take about eleven working days to make that kind of money. And a bad crop spells disaster for some.
Let me offer an example or two of that I see quite often. A single family dwelling, in the country, is served by a 60 amp service which feeds a Main/Range - 8 fuse box located in one of the kitchen cabinets. The 60 amp meter base also feeds a 30 amp, interior type, surface-mounted breaker box, which in turn serves a nearby tractor equipment shed. The deadfront on this box has long ago been lost. The service entrance cable is completely deteriorated and has no insulating jacket on it. The feeder cable which runs across the attic is so old and dried out and brittle that the least amount of movement causes the insulation to crack and fall away. Terminal lugs in the can show signs of severe overheating because sometime back, some jackleg electrician tapped the mains to subfeed both a window air conditioner AND a dryer. (It was cheaper than rebuilding the service, and, after all, he told them NOT TO DRY CLOTHES

WHILE THE AIR CONDITIONER WAS RUNNING). Of the 8 branch circuit fuses, 4 are feeding 2 circuits each and all of the 15 and 20 amp fuses have been replaced with 30's. Two fuse blocks are cracked and one is taped together (with duct tape). There is only one receptacle in each room, including the kitchen of this 60 year old farmhouse. Each consists of a plastic, surface-mounted, feed-through receptacle fed by old cloth covered 14-2 romex which is routed along the baseboards, through the walls into each room in a continuous loop. This romex has been painted so many times it resembles part of the woodwork. There is no bath receptacle. Lighting consists of a porcelain, pull-chain fixture and a 60 watt bulb in each room. Wiring for the lighting is knob and tube.

You mandated reinspector walks in on this situation, condemns it and gives the occupants 30 days to repair it or the power gets turned off.

The occupants are elderly and on Social Security.

The occupants are on welfare.

The occupants are a single mother and 3 kids and are on AFDC.

The occupants are a disabled farmer, his wife and 2 kids.

The occupants make less than $8,000.00 per year as farmers.

The occupants DON'T HAVE THE MONEY. If they did they would have had it fixed long before the inspector ever got there!

What to do? Turn off the power? Condemn the property? Put the family on the street? Arrest'em for violation of State Statutes? Fine them??

It doesn't take a real genius too figure out that this dwelling violates most of the proposed NFPA 73's general requirements. And I think that most "field electricians" would agree that rural America is like that. But you can't simply mandate instant cure! As in the past, repairs and upgrades are made as dwellings become vacant. Between owners, if you will. It is a system based on attrition and it works just fine.

The record books state that Jacksonville, Onslow County is the mobile home capitol of the world. We have more mobile homes per square mile than anywhere else. Consequently, those of us in the electrical trade see and repair more mobile homes than anyone else. Paragraph 1-2.2 omits mobile homes from reinspection. Gentlemen of the committee, in my opinion, a mobile home is the biggest fire trap ever devised by man! Electrically, it is the shabbiest, most poorly designed contraption we have allowed ourselves to inhabit, to date. But yet, you omit these.

You also omit public places. Hotels, motels, apartment buildings, etc. Does that mean we can jeapordize the publics safety but not our own?

In summary I would again urge the committee to cease and desist in this endeavor. You simply cannot mandate America to be electrically safe. You may very well educate the masses, but you cannot force folks, who simply do not have the finances, to fix things up.

Secondly, you should not even consider handing down this kind of uncontrolled authority. True, we have some fine inspectors, but we don't all have fine inspectors. As we ALL know, the NEC is largely subject to interpretation. It has been and still is, the biggest bone of contention in the electrical field. Read the letters to the "experts" in the trade magazines. How many times have you read of inspectors usurping their authority, simply because, "I said so", or "because that's the way I want it". Give these same guys NFPA 73 and they'll be telling folks what brand of light bulbs to buy.

Finally, I would take this opportunity to thank the Committee for taking the time to read this rather lengthy proposal and for your kind consideration, whatever your final decision.

COMMITTEE ACTION: Reject.

COMMITTEE STATEMENT: The Committee is mindful of the concerns expressed by the submitter. Numerous reinspections are taking place daily as a result of home sale disclosure laws, lending institution requirements, or simply the desire of home buyers to exercise good diligence. No document exists defining such an inspection. The proposed code will provide an inspection procedure.

This document does not define when inspections are required. That is the purview of state or local adoption laws.

The submitter eloquently defined the unsafe conditions this code is intended to identify. The paragraph offering examples describes why this code is needed. The Committee rejects the suggestion that it discontinue its effort to address these hazards. Statistics clearly show the need to reduce fire and shock hazards in one- and two-family dwellings.

VOTE ON COMMITTEE ACTION: Unanimously Affirmative.

(Log # 72)

73- 5 - (1-1): Accept

SUBMITTER: Brian E. Rock, Hubbell, Inc.

RECOMMENDATION: Delete "mandatory" from "The purpose of this Code is to provide *mandatory* requirements. . .".

SUBSTANTIATION: The Code must first be adopted by the Authority Having Jurisdiction, and then "mandatory" becomes a matter of enforcement, already addressed in Section 1-3. This is also consistent with the organization of the NEC" (NFPA 70).

COMMITTEE ACTION: Accept.

COMMITTEE STATEMENT: The presumption is correct that when and where the document is adopted, the adopting agency will enforce the document as a set of mandatory requirements.

VOTE ON COMMITTEE ACTION: Unanimously Affirmative.

(Log # 73)

73- 6 - (1-1): Reject

SUBMITTER: Brian E. Rock, Hubbell, Inc.

RECOMMENDATION: Add "potential" to ". . . identify *potential* safety, fire and shock hazards, . . .".

SUBSTANTIATION: The purpose of this Code is to remedy potential hazards before they exact a safety, fire or shock toll. Also, definitively identifying equipment as "hazards" in absolute terms (versus "potential hazards") by a home inspector lacking the technical expertise and testing capability to make such judgments may introduce product liability litigation excesses.

Also, editorial correction: semi-colon following "hazards" should be comma.

COMMITTEE ACTION: Reject.

COMMITTEE STATEMENT: This inspection is intended to identify what is visible at the time of inspection. Use of the term "potential" could inappropriately imply detection of hazards not foreseeable.

Editorial correction not needed. The text is in compliance with the NFPA Style Manual.

VOTE ON COMMITTEE ACTION: Unanimously Affirmative.

(Log # 74)

73- 7 - (1-1): Reject

SUBMITTER: Brian E. Rock, Hubbell, Inc.

RECOMMENDATION: Revise the final sentence to read:

"It is not the intent of this Code to define installation requirements that may be desired for convenience or utilitarian purposes or to mandate newer National Electrical Code" requirements in the absence of potential hazards."

SUBSTANTIATION: Retroactivity of newer NEC" (NFPA 70) requirements in the absence of unsafe deterioration is contrary too purpose of this Reinspection Code and to the charge given to the NFPA 73 Committee.

COMMITTEE ACTION: Reject.

COMMITTEE STATEMENT: This Code does not retroactively require newer NET requirements in the absence of unsafe deterioration.

VOTE ON COMMITTEE ACTION: Unanimously Affirmative.

(Log # 95)

73- 8 - (1-1): Reject

SUBMITTER: Michael J. Foley, Englewood, CO

RECOMMENDATION:

"The purpose of this ~~Code~~ Standard is to provide ~~mandatory~~ minimum requirements. . .".

"It is the intent of this ~~Code~~ Standard to provide criteria that will enable. . .".

"It is not the intent of this ~~Code~~ Standard to provide for the inspection. . .".

SUBSTANTIATION: In keeping with other NFPA documents similar to this document the term "Code" is inappropriate.

Use of the term "mandatory" suggests authority that is not available to the NFPA. If these minimum requirements, similar to the National Electrical Code, are adopted by governmental agencies then the standard would be mandatory.

COMMITTEE ACTION: Reject.

COMMITTEE STATEMENT: Document is a Code in accordance with NFPA definitions under Part VII (Committee Projects).

The word "minimum" implies less than adequate and is inappropriate for this Code. Committee's intent was that the document would be a Code suitable for adoption.

VOTE ON COMMITTEE ACTION: Unanimously Affirmative.

(Log # 48)

73- 9 - (1-2.1): Accept

SUBMITTER: James Pauley, Square D Co.

RECOMMENDATION: Add text in parenthesis:

". . . without removing any (permanent) part of the building structure or finish."

SUBSTANTIATION: The current wording would imply that a plywood panel used for blocking crawl space access could not be removed for inspection of wiring and/or equipment installed in the crawl space. The addition of permanent would clarify that this type of access is not part of the building finish.
COMMITTEE ACTION: Accept.
COMMITTEE STATEMENT: The Committee understands that the scope issues are within the responsibility of the Correlating Committee.
VOTE ON COMMITTEE ACTION: Unanimously Affirmative.

(Log # 29)

73- 10 - (1-2.1Note 1): Reject
SUBMITTER: David E Shapiro, Safety First Electrical Contracting, Consulting and Safety Education
RECOMMENDATION: Delete text of Note 1 after "fixtures."
SUBSTANTIATION: There are legitimate reasons within the context of NFPA 73 to remove covers other than examination for these conditions. Example: checking for use of inappropriate wiring methods.
COMMITTEE ACTION: Reject.
COMMITTEE STATEMENT: The Committee believes it is necessary to state in the text of Note 1, why removal of a faceplate etc. is permitted. See Proposal 73-11 for further clarification.
The Committee understands that the scope issues are within the responsibility of the Correlating Committee.
VOTE ON COMMITTEE ACTION: Unanimously Affirmative.

(Log # CP1)

73- 11 - (1-2.1 Note No. 1): Accept
SUBMITTER: Technical Committee on Electrical Systems Maintenance,
RECOMMENDATION: Revise existing text to read as follows:
"It is not "intended" for this code to prohibit the removal of faceplates or other covers or fixtures to identify hazards."
SUBSTANTIATION: To clarify that removal of the faceplate is to enable inspections for hazards.
The Committee understands that the scope issues are within the responsibility of the Correlating Committee.
COMMITTEE ACTION: Accept.
VOTE ON COMMITTEE ACTION: Unanimously Affirmative.

(Log # 28)

73- 12 - (1-2.1 Note 1): Accept in Principle
SUBMITTER: David E Shapiro, Safety First Electrical Contracting, Consulting and Safety Education
RECOMMENDATION: If the committee is not willing to delete text of Note 1, after "fixtures," then add the following after "conditions" or to evaluate the materials and workmanship employed in the installation.
SUBSTANTIATION: These are legitimate reasons within the context of NFPA 73 to remove covers other than examination for these conditions. Example: checking for use of inappropriate wiring methods.
COMMITTEE ACTION: Accept in Principle.
COMMITTEE STATEMENT: See Committee Statement on Proposal 73-11.
The Committee understands that the scope issues are within the responsibility of the Correlating Committee.
VOTE ON COMMITTEE ACTION: Unanimously Affirmative.

(Log # 30)

73- 13 - (1-2.1Note 2): Reject
SUBMITTER: David E Shapiro, Safety First Electrical Contracting, Consulting and Safety Education
RECOMMENDATION: Add text after "equipment" as follows:
"that is in good good condition."
SUBSTANTIATION: As presently worded, the worse the condition of the building, the less can the electrical system be inspected. Many a time have I removed a cover plate, only to have a chunk of plaster come loose — that was all that secured it.
COMMITTEE ACTION: Reject.
COMMITTEE STATEMENT: The Committee believes the present text adequately covers the proposers concerns.
The Committee understands that the scope issues are within the responsibility of the Correlating Committee.
VOTE ON COMMITTEE ACTION: Unanimously Affirmative.

(Log # 102)

73- 14 - (1-2.1Note 4 (New)): Reject
SUBMITTER: Richard Widera, FL Chapter/Int'l Assoc. of Electrical Inspectors
RECOMMENDATION: Add new text to read as follows:
"Periodic inspection schedules shall be established by the local Authority Having Jurisdiction. Length of inspection intervals shall not exceed five years (60 months.)"
SUBSTANTIATION: Establishes a standard for inspection intervals with which the industry can either accept or modify on a local amendment basis. Correlates to 1-3.2 wherein the Authority Having Jurisdiction may waive requirements.
COMMITTEE ACTION: Reject.
COMMITTEE STATEMENT: This document covers the inspection procedures. It is not intended to cover administrative requirements such as normally found in adoption requirements.
The Committee understands that the scope issues are within the responsibility of the Correlating Committee.
VOTE ON COMMITTEE ACTION: Unanimously Affirmative.

(Log # 103)

73- 15 - (1-2.1Note 5 (New)): Reject
SUBMITTER: Richard Widera, FL Chapter/Int'l Assoc. of Electrical Inspectors
RECOMMENDATION: Add new text to read as follows:
"Inspections are to be performed by the Authority Having Jurisdiction, or if in the case of the Authority Having Jurisdiction relegating authority, by properly licensed private sector Master Electricians."
SUBSTANTIATION: Establishes a standard of warranting qualified personnel to perform the inspections. Relieves the Authority Having Jurisdiction of the burden for inspecting where budgetry and personnel availability are inadequate. Correlates to 1-3.2 wherein the Authority Having Jurisdiction may waive requirements.
COMMITTEE ACTION: Reject.
COMMITTEE STATEMENT: See Committee Statement on Proposal 73-14.
The Committee understands that the scope issues are within the responsibility of the Correlating Committee.
VOTE ON COMMITTEE ACTION: Unanimously Affirmative.

(Log # 21)

73- 16 - (1-2.2): Reject
SUBMITTER: David E Shapiro, Safety First Electrical Contracting, Consulting and Safety Education
RECOMMENDATION: Add portions of between "more than two dwelling units," and "buildings used for other . . .".
SUBSTANTIATION: There is no reason to exempt an apartment over or behind a store. Worse, a home used as a private day care facility is exempt from commercial zoning requirements in many areas. Surely that should be covered.
COMMITTEE ACTION: Reject.
COMMITTEE STATEMENT: It is the intent of the Committee to limit this document to one- and two-family dwellings at this time.
The Committee understands that the scope issues are within the responsibility of the Correlating Committee.
VOTE ON COMMITTEE ACTION: Unanimously Affirmative.

(Log # 49)

73- 17 - (1-2.2Note 1 (New)): Reject
SUBMITTER: James Pauley, Lexington, KY
RECOMMENDATION: Add FPN to 1-2.2 as follows:
"(FPN): It is the intent of this code to apply to homes which are mounted on a permanent foundation and built to other than HUD standards."
SUBSTANTIATION: There is much confusion in the NEC regarding mobile homes versus factory built homes. Factory built homes are built in a factory but comply with local codes and ordinances. HUD constructed homes are the manufactured homes (formerly known as mobile homes). It is important not to exclude the factory built home from this code since addition of electrical equipment and branch wiring is as likely in this home as it is in a site built home.

COMMITTEE ACTION: Reject.
COMMITTEE STATEMENT: Local building codes typically define construction requirements for various types of buildings.
The Committee understands that the scope issues are within the responsibility of the Correlating Committee.
VOTE ON COMMITTEE ACTION: Unanimously Affirmative.

(Log # 104)

73- 18 - (1-2.2Note 1 (New)): Reject
SUBMITTER: Richard Widera, FL Chapter/Int'l Assoc. of Electrical Inspectors
RECOMMENDATION: Add a FPN-Fine Print Note to stipulate that the interpretation of "mobile homes" (9th and 10th words of the sentence) and the interpretation of "buildings" (15th word in the sentence) is to comply with the applicable building codes enforced by the Authority Having Jurisdiction.
SUBSTANTIATION: Interpretations, spurious or accurate in nature, as regards occupancies with fire rated walls, ceilings, floors, etc., should comply with the codes enforced by the Authority Having Jurisdiction. As an example - a structure with 4 townhouses of 2 floors each separated by a 4 hr fire wall which extends through the roof line. Some people could or will call this a building containing more than two dwelling units, when according to most building codes being enforced, this example would be treated as four separate buildings.
As regards mobile homes, it has become commonplace throughout the country to make a distinction between a mobile home, manufactured housing, and modular housing. Thus following the locally enforced building codes will obviate any discrepancy in or of interpretation as regards this document.
COMMITTEE ACTION: Reject.
COMMITTEE STATEMENT: The Committee agrees with the concept offered by the submitter. However this document is not the appropriate place for such administrative requirements.
See also, Proposal 73-17.
The Committee understands that the scope issues are within the responsibility of the Correlating Committee.
VOTE ON COMMITTEE ACTION: Unanimously Affirmative.

(Log # 110)

73- 19 - (1-3.1): Reject
SUBMITTER: Donald A. Rossi, Philadelphia, PA
RECOMMENDATION: Proposed new text:
"Elec. Cont. is most qualified for existing home (Res.) inspection. His knowledge and expertise along with equipped with tools and test equipment he can properly test electrical systems, evaluate the situation and perform the remedies required."
SUBSTANTIATION: None.
COMMITTEE ACTION: Reject.
COMMITTEE STATEMENT: See Committee Statement on Proposal 73-2.
VOTE ON COMMITTEE ACTION: Unanimously Affirmative.

(Log # 56)

73- 20 - (1-3.1): Accept in Principle
SUBMITTER: Laurence Ward, NEMA
RECOMMENDATION: Clarify the final sentence. As written, this may be misinterpreted to imply that remedial action is to be in accordance with the latest published edition of the NEC, rather than the edition adopted by the Authority Having Jurisdiction.
SUBSTANTIATION: The sentence ignores and therefore negates more stringent supplemental local codes which should be explicitly recognized.
COMMITTEE ACTION: Accept in Principle.
COMMITTEE STATEMENT: The adoption of specific editions of the NEC and/or supplemental requirements is a local issue and would be covered in the adoptions ordinance. This Code intentionally does not specify an edition in recognition of this.
See also Committee Action on Committee Proposal 73-21.
VOTE ON COMMITTEE ACTION: Unanimously Affirmative.

(Log # CP2)

73- 21 - (1-3.1 Note (New)): Accept
SUBMITTER: Technical Committee on Electrical Systems Maintenance,
RECOMMENDATION: In the last sentence of this section change "amended" to "modified."
Also add a new note as follows:
NOTE: It is the intent of this code to only require remedial action necessary to correct the identified hazards.
SUBSTANTIATION: To clearly indicate that this code does not amend the NEC. To clarify that this code is not intended to be used to require upgrading or rewiring not associated with a specific hazard.
COMMITTEE ACTION: Accept.
VOTE ON COMMITTEE ACTION: Unanimously Affirmative.

(Log # 75)

73- 22 - (1-3.1): Accept in Principle
SUBMITTER: Brian E. Rock, Hubbell Inc.
RECOMMENDATION: Add ". . . the most recent edition of . . .", ". . . adopted by the jurisdiction. . ." and ". . . and local Codes and regulations" to the last sentence to read as follows:
"Where remedial action is required by the Authority Having Jurisdiction, it shall be performed in accordance with the most recent edition of NFPA 70, National Electrical Code" adopted by the jurisdiction, except as amended by this Code and local Codes and regulations."
SUBSTANTIATION: The final sentence requires explicit clarification. Mortgage guarantors and the secondary mortgage market may perceive a greater investment risk when an older residence has undergone remedial action and may demand stronger affirmation that compliance has been achieved than the Authority Having Jurisdiction can provide. Relative to new residence sales, resale of existing residences would become far less attractive to the secondary mortgage market. This final sentence may therefore be misinterpreted, and consequently demanded to minimize investment, by the mortgage community to imply that remedial action is to be in accordance with the latest published edition of the NEC" (NFPA 70), rather than the edition adopted by the Authority Having Jurisdiction for new construction.
This final sentence also ignores and therefore negates more stringent supplemental local Codes (in contrast to the less stringent local waivers recognized in 1-3.2) for new installations that would have been incumbent upon remedial action otherwise. Local Codes must also be explicitly recognized to avoid disputes between the local Authority Having Jurisdiction and national mortgage guarantor organizations unfamiliar with local electrical code practices, particularly regarding compliance attainment where corrective action had been deemed necessary.
COMMITTEE ACTION: Accept in Principle.
COMMITTEE STATEMENT: See Committee Action on Proposal 73-20.
VOTE ON COMMITTEE ACTION: Unanimously Affirmative.

(Log # 37)

73- 23 - (1-3.3 (New)): Reject
SUBMITTER: Vernon Wright, Wright Home Inspection
RECOMMENDATION: Add new text to read as follows:
1-3.3 Inspections to determine compliance with this Code shall be conducted by persons qualified as licensed or journeyman electricians, or persons who, at minimum, are certified as Electrical Inspector 1 and 2 Family.
SUBSTANTIATION: It's only reasonable that persons conducting these inspections should have demonstrated reasonable knowledge of residential electrical systems.
COMMITTEE ACTION: Reject.
COMMITTEE STATEMENT: See Committee Statement on Proposal 73-14.
VOTE ON COMMITTEE ACTION: Unanimously Affirmative.

(Log # 20)

73- 24 - (1-4): Reject
SUBMITTER: David E Shapiro, Safety First Electrical Contracting, Consulting and Safety Education
RECOMMENDATION: Section 1-4 fails of its stated task. Delete it and refer readers to NFPA 70.
SUBSTANTIATION: The terms are adequately defined in NFPA 70, a "related code and standard." If NFPA 73 is being kept intentionally short, we would be far better off limiting it to specific differences from NFPA 70.
COMMITTEE ACTION: Reject.
COMMITTEE STATEMENT: Although the Committee agrees, at least in part, with the submitter, in the utilization of existing

standards for the application of definitions, the Committee also feels that the few definitions contained in Section 1-4 are appropriately placed within this Code.
VOTE ON COMMITTEE ACTION: Unanimously Affirmative.

(Log # 96)

73- 25 - (1-4): Reject
SUBMITTER: Michael J. Foley, Englewood, CO
RECOMMENDATION: Delete definitions already in the National Electrical Code.
SUBSTANTIATION: Repeating terms already defined in the NEC is redundant and results in confusion when revision schedules of the two documents is different.
COMMITTEE ACTION: Reject.
COMMITTEE STATEMENT: See Committee Statment on Proposal 73-24.
VOTE ON COMMITTEE ACTION: Unanimously Affirmative.

(Log # 11)

73- 26 - (1-4 Accessible, Readily: (Readily Accessible) (New)): Reject
SUBMITTER: Jamie McNamara, Hasting,, MN
RECOMMENDATION: Add to 1-4 the following text:
1-4 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, chairs, etc. (See Accessible.)
SUBSTANTIATION: None.
COMMITTEE ACTION: Reject.
COMMITTEE STATEMENT: No substantiation provided. The term is not used in this document.
VOTE ON COMMITTEE ACTION: Unanimously Affirmative.

(Log # 78)

73- 27 - (1-4 Appliances): Reject
SUBMITTER: Brian E. Rock, Hubbell Inc.
RECOMMENDATION: Delete "appliances" from "material, fittings, devices, . . ., fixtures," etc.
SUBSTANTIATION: This definition includes "appliances." The penultimate sentence of Section 1-1, however, excludes appliances from inspection.
COMMITTEE ACTION: Reject.
COMMITTEE STATEMENT: The definition is necessary and appropriate for the proper use of this Code.
VOTE ON COMMITTEE ACTION: Unanimously Affirmative.

(Log # 58)

73- 28 - (1-4 Equipment): Reject
SUBMITTER: Laurence Ward, NEMA
RECOMMENDATION: In the definition of Equipment delete reference to "appliances."
SUBSTANTIATION: This definition includes "appliances" along with "material, fittings, devices, . . ., fixtures, etc. This is directly in conflict with exclusions in 1-1.
COMMITTEE ACTION: Reject.
COMMITTEE STATEMENT: See Committee Statement on Proposal 73-27.
VOTE ON COMMITTEE ACTION: Unanimously Affirmative.

(Log # 76)

73- 29 - (1-4 Bonding): Reject
SUBMITTER: Brian E. Rock, Hubbell, Inc.
RECOMMENDATION: Add "non-current-carrying" and "reduce potential shock hazards" to the definition, of Bonding, delete "any" before "current likely to be imposed", replace "current" with "fault currents" and "assure" with "by assuring":
Bonding: The permanent joining of non-current-carrying metallic parts to form an electrically conductive path which will reduce potential shock hazards by assuring electrical continuity and the capacity to conduct safely fault currents likely to be imposed.
SUBSTANTIATION: Although the Draft definition is taken directly from the NEC" (NFPA 70), it is insufficiently definitive for existing home inspectors not versed in NEC" terminology. Delete all-inclusive "any current"; fault currents from extremely large discharges such as direct lightning strikes may not be within the capacity of the particular bonding.
COMMITTEE ACTION: Reject.
COMMITTEE STATEMENT: Differing definitions between two closely related Codes could cause confusion.
The Committee believes that the additional wording does not add clarity to the definition.
This Code is not intended to be used by untrained persons.
VOTE ON COMMITTEE ACTION: Unanimously Affirmative.

(Log # 60)

73- 30 - (1-4 Bonding): Reject
SUBMITTER: Laurence Ward, NEMA
RECOMMENDATION: Define the term "Bonding" in laymen terms.
SUBSTANTIATION: Though consistent with the NEC, this definition is insufficient for existing home inspectors not versed in he NEC terminology.
COMMITTEE ACTION: Reject.
COMMITTEE STATEMENT: See Committee Statement on Proposal 73-29.
VOTE ON COMMITTEE ACTION: Unanimously Affirmative.

(Log # 59)

73- 31 - (1-4 Branch Circuit): Accept in Principle
SUBMITTER: Laurence Ward, NEMA
RECOMMENDATION: Revise text to read as follows:
Branch Circuit. This definition includes a Fine Print Note (FPN) that references Section 240-9 and 240-10, of the NEC but not contained in NFPA 73 draft.
SUBSTANTIATION: This document should stand alone without requirements for additional code books unless the intended audience is exclusively electrical inspectors with access to the NEC.
COMMITTEE ACTION: Accept in Principle.
COMMITTEE STATEMENT: See Committee Action on Proposal 73-32.
VOTE ON COMMITTEE ACTION: Unanimously Affirmative.

(Log # 77)

73- 32 - (1-4 Branch Circuit): Accept
SUBMITTER: Brian E. Rock, Hubbell, Inc.
RECOMMENDATION: Delete (FPN) Fine Print Note in the definition of Branch Circuit.
SUBSTANTIATION: This definition includes a (FPN) Fine Print Note that references Sections 240-9 and -10, which are not in this Code (not stated, but actually from NEC" [NFPA 70].)
COMMITTEE ACTION: Accept.
VOTE ON COMMITTEE ACTION: Unanimously Affirmative.

(Log # 32)

73- 33 - (1-4 Branch Circuit): Reject
SUBMITTER: Glenn W Zieseniss, Crown Point,, IN
RECOMMENDATION: Add after — 240-10 "of the 1990 NFPA 70 document" for thermal —
(added words between quotation marks) to read:
(FPN): See Section 240-9 and Section 240-10 of the 1990 NFPA 70 Document for thermal relays, —
SUBSTANTIATION: Unless the NFPA 73 and the NFPA 70 are documents are updated as a combination every three years, the reference to 240-9 and 240-10 may apply to erroneous code sections after a period of time.
COMMITTEE ACTION: Reject.
COMMITTEE STATEMENT: The FPN was deleted by action on Proposal 73-32.
VOTE ON COMMITTEE ACTION: Unanimously Affirmative.

(Log # 42)

73- 34 - (1-4): Reject
SUBMITTER: John E. Gathergood, Fort Gratiot Township
RECOMMENDATION: Add new text to 1-4 to read as follows:
Evidence of Inadequacy. Any of the following shall be considered evidence of inadequacy:
(a) Use of cords in lieu of permanent wiring.
(b) Oversizing of overcurrent protection for circuits, feeders or service.
(c) Unapproved extensions to the wiring system in order to provide light, heat or power.
(d) Electrical overload.
(e) Misuse of electrical equipment.

(f) Lack of lighting fixtures in bathrooms, laundry room, furnace room, stairway or basement.
SUBSTANTIATION: None.
COMMITTEE ACTION: Reject.
COMMITTEE STATEMENT: No technical substantiation to add this new definition. The intent of the Committee is to leave interpretation of "inadequacy" up to Authority Having Jurisdiction.
VOTE ON COMMITTEE ACTION: Unanimously Affirmative.

(Log # 9)
73- 35 - (1-4 Ground-Fault Circuit-Interrupter (New)): Accept
SUBMITTER: Stanley R Cowan, Missouri Dept. of Health
RECOMMENDATION: Add a new definition to read as follows:
Ground-Fault Circuit-Interrupter. A device intended for the protection of personnel that functions to deenergize a circuit or portion thereof within an established period of time when a current to ground exceeds some predetermined value that is less than that required to operate the overcurrent protective device of the supply circuit.
SUBSTANTIATION: GFIC's are not addressed in the current proposed code and a definition should be included.
COMMITTEE ACTION: Accept.
VOTE ON COMMITTEE ACTION: Unanimously Affirmative.

(Log # 57)
73- 36 - (1-4 Ground-Fault Circuit-Interrupter and Labeled (New)): Accept in Principle in Part
SUBMITTER: Laurence Ward, NEMA
RECOMMENDATION: Add definitions for "Ground-Fault Circuit-Interrupter" and "Labeled". Definitions could be similar to those in the NEC.
SUBSTANTIATION: Add definitions to assist those inspection professionals that may not be familiar with NEC wording.
COMMITTEE ACTION: Accept in Principle in Part.
Accept GFCI portion.
Reject recommendation for labeled.
COMMITTEE STATEMENT: For GFCI Portion, see Proposal 73-35.
For labeled, see Proposal 73-38.
VOTE ON COMMITTEE ACTION: Unanimously Affirmative.

(Log # 79)
73- 37 - (1-4 Ground-Fault Circuit-Interrupter (New)): Accept
SUBMITTER: Brian E. Rock, Hubbell, Inc.
RECOMMENDATION: Add a new definition to read as follows:
Ground-Fault Circuit-Interrupter. A device intended for the protection of personnel that functions to deenergize a circuit or portion thereof within an established period of time when a current to ground exceeds some predetermined value that is less than that required to operate the overcurrent protective device of the supply circuit.
SUBSTANTIATION: Definition is required for "Ground-Fault Circuit-Interrupter" used elsewhere in this Code. The enforcement audience is not electrical inspectors, but existing home inspection professionals not familiar with NEC" (NFPA 70) wording.
COMMITTEE ACTION: Accept.
COMMITTEE STATEMENT: It is the Committee's intention that this document be enforced by qualified individuals familiar with this document and the NEC.
VOTE ON COMMITTEE ACTION: Unanimously Affirmative.

(Log # 80)
73- 38 - (1-4 Labeled (New)): Reject
SUBMITTER: Brian E. Rock, Hubbell, Inc.
RECOMMENDATION: Add a new definition to read as follows:
Labeled. Equipment or materials to which has been attached a label, symbol, or other identifying mark of an organization acceptable to the Authority Having Jurisdiction and concerned with product evaluation, that maintains periodic inspection of production of labeled equipment or materials and by whose labeling the manufacturer indicates compliance with appropriate standards or performance in a specified manner.
SUBSTANTIATION: Definition is required for "Labeled" used elsewhere in this Code. The enforcement audience is not electrical inspectors, but existing home inspection professionals not familiar with NEC" (NFPA 70) wording.
COMMITTEE ACTION: Reject.
COMMITTEE STATEMENT: The term is not used in this document.
VOTE ON COMMITTEE ACTION: Unanimously Affirmative.

(Log # 31)
73- 39 - (1-4 Panelboard Receptacle Outlet): Reject
SUBMITTER: Glenn W Zieseniss, Crown Point,, IN
RECOMMENDATION: Delete the entire definition.
SUBSTANTIATION: The NFPA 70 definition for PANELBOARD contains the words ",automatic overcurent devices,".
I believe the word PANELBOARD in the NFPA 73 may be construed by some AHJ's to mean the receptacle(s) must be in the Service Entrance panelboard. The definition for OUTLET: should suffice. If the code panel wants to keep the PANELBOARD RECEPTACLE OUTLET definition, maybe a FPN similar to the FPN for the NFPA 70 definition of RECEPTACLE: would help to make it clear that more than one yoke (or strap) at an outlet location would be considered a panel of outlets.
COMMITTEE ACTION: Reject.
COMMITTEE STATEMENT: No reference exists in the current Section 1-4.1 to "panelboard receptacle outlet" and therefore no action can be taken but to reject.
This was editorially corrected in subsequent editions of the draft.
VOTE ON COMMITTEE ACTION: Unanimously Affirmative.

(Log # CP3)
73- 40 - (1-4 Panelboard): Accept
SUBMITTER: Technical Committee on Electrical Systems Maintenance,
RECOMMENDATION: Add definition of panelboard as follows:
Panelboard: A single panel or group of panel units designed for assembly in the form of a single panel; including buses, 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 or partition and accessible only from the front.
SUBSTANTIATION: The term is used in this document.
COMMITTEE ACTION: Accept.
VOTE ON COMMITTEE ACTION: Unanimously Affirmative.

(Log # 5)
73- 41 - (2-2 (New)): Accept in Principle
SUBMITTER: Stanley R Cowan, Missouri Dept. of Health
RECOMMENDATION: Include a new sentence to read as follows:
"Service conductors shall have a clearance of not less than 3 ft from windows, doors, porches, fire escapes, or similar locations (except that conductors run above the top level of a window shall be permitted to be less than the 3 ft requirement.)"
SUBSTANTIATION: This would place service conductors out of reach people using these openings.
COMMITTEE ACTION: Accept in Principle.
COMMITTEE STATEMENT: The purpose of this Code is to provide requirements for installed electrical systems not to provide specific installation requirements. The Committee Action on Proposal 73-48 includes requirements for evaluating clearance of service conductors.
VOTE ON COMMITTEE ACTION: Unanimously Affirmative.

(Log # 6)
73- 42 - (2-2 (New)): Reject
SUBMITTER: Stanley R Cowan, Missouri Dept. of Health
RECOMMENDATION: Include a new sentence as follows:
"Service raceways shall be equipped with a rain-tight service head and so arranged that water will not enter the service raceway or equipment."
SUBSTANTIATION: This is intended to prevent water from entering equipment and causing a short or a fire.
COMMITTEE ACTION: Reject.
COMMITTEE STATEMENT: This Code is intended to provide requirements for evaluating installed electrical systems to identify safety, fire and shock hazards.
The proposal is an installation requirement not appropriate for this code. Installation requirements are provided in the NEC.
VOTE ON COMMITTEE ACTION: Unanimously Affirmative.

(Log # 7)

73- 43 - (2-2): Reject
SUBMITTER: Stanley R Cowan, Missouri Dept. of Health
RECOMMENDATION: Include a new sentence to read as follows:
"Drip loops shall be formed on individual conductors."
SUBSTANTIATION: Keeping rainwater and moisture out of weatherheads is necessary and easily corrected
COMMITTEE ACTION: Reject.
COMMITTEE STATEMENT: See Committee Statement on Proposal 73-42.
VOTE ON COMMITTEE ACTION: Unanimously Affirmative.

(Log # 52)

73- 44 - (2-2): Reject
SUBMITTER: William J. Dain, Long Island Elect. Insp. Svc.
RECOMMENDATION: Add new text to read as follows:
"Ensure that no more than 6 means of disconnect exists per service."
SUBSTANTIATION: Older panels without mains are sometimes over "breakend" violating 230-71 common problem that is sometimes overloaded.
COMMITTEE ACTION: Reject.
COMMITTEE STATEMENT: The service equipment, in accordance with Section 2-2.1, is required to be adequate for the load served. The number of overcurrent devices contained within service equipment should not be a determining factor in determining adequacy of such equipment such as ample capacity to serve the electrical load on that equipment.
See also Proposal 73-42.
VOTE ON COMMITTEE ACTION: Unanimously Affirmative.

(Log # 61)

73- 45 - (2-2.1): Accept in Principle
SUBMITTER: Laurence Ward, NEMA
RECOMMENDATION: Revise text to allow 120/208Y, 3 phase service.
SUBSTANTIATION: Residences are frequently provided with 2 phases of a 120/208 wye service, and should be permitted. Many older (historic register named) residence are wired for 2-wire service. In the absence of insulation deterioration, this service should be permitted.
COMMITTEE ACTION: Accept in Principle.
Delete the last sentence of Section 2-2.1.
COMMITTEE STATEMENT: In deleting the last sentence of this section, the Code will then require a service to be adequate to serve whatever load it is required to serve, regardless of system configuration or service equipment capacity.
VOTE ON COMMITTEE ACTION: Unanimously Affirmative.

(Log # 112)

73- 46 - (2-2.1): Accept in Principle
SUBMITTER: Arthur W. Hesse, Prince George's Cnty
RECOMMENDATION: Add new text to read as follows:
"Service entrance cables shall be properly sized to satisfy connected load."
SUBSTANTIATION: Often older one and two family residences have had the service panel replaced to permit more branch circuits and larger loads but SEC cable ampacity is not changed.
COMMITTEE ACTION: Accept in Principle.
COMMITTEE STATEMENT: See Committee Statement on Proposal 73-45.
VOTE ON COMMITTEE ACTION: Unanimously Affirmative.

(Log # 81)

73- 47 - (2-2.1): Accept
SUBMITTER: Brian E. Rock, Hubbell, Inc.
RECOMMENDATION: Delete the requirement for 120/240 volt, 3-wire, 60 amp minimum service.
SUBSTANTIATION: Retroactivity of newer NEC" (NFPA 70) requirements in the absence of unsafe deterioration is contrary to purpose of this Reinspection Code and to the charge given to the NFPA 73 Committee.
120/240 volts is specified as minimum, yet residences are frequently served by two phases of a 120/208 volt 30Y system. What aspect of deterioration is addressed by a minimum service voltage? With no further clarification as to what this minimum means (really a minimum nominal, not a minimum operating voltage), would a home inspector reject a home delivering 108 or 216 volts from the outlets due to allowed - 10 percent utility fluctuation?
3-wire service is specified as a minimum, yet many older residences in New York City, for example, are wired for 2-wire service. In the absence of deterioration, would these residences have to be rewired?
60 amp service is specified as a minimum, yet many older residences have 40 amp service. In the absence of inoperative circuit protection, would these residences have to be rewired?
The safety concern should be that the residence's electrical service is not the result of an illegal cord drop.
COMMITTEE ACTION: Accept.
COMMITTEE STATEMENT: See also Committee Statement on Proposal 73-45.
VOTE ON COMMITTEE ACTION: Unanimously Affirmative.

(Log # 22)

73- 48 - (2-2.3): Accept in Part
SUBMITTER: David E Shapiro, Safety First Electrical Contracting, Consulting and Safety Education
RECOMMENDATION: Delete "excessive insulation." Add after "deterioration", of conductor insulation or cable sheath to the extent that voids, separations or cracks are visible.
SUBSTANTIATION: Without specificity, guidelines are of little value and invite capricious application.
COMMITTEE ACTION: Accept in Part.
Reject "excessive insulation."
Accept "of conductor insulation or cable sheath"
Reject the rest. To read as follows:
2-2.3 Service conductors shall not show evidence of excessive deterioration of conductor insulation or cable sheath and shall have adequate clearances.
COMMITTEE STATEMENT: Enforcement of this code is to be accomplished by individuals familiar with electrical installation so as to be able to identify a hazard created by excessive deterioration.
The deletion of "entrance" and addition of "and shall have adequate clearance." addresses the submitter's concerns in Proposal 73-41 which was accepted in principle.
VOTE ON COMMITTEE ACTION: Unanimously Affirmative.

(Log # 62)

73- 49 - (2-2.3): Accept in Principle
SUBMITTER: Laurence Ward, NEMA
RECOMMENDATION: Add text to define "Excessive insulation deterioration."
SUBSTANTIATION: Without a definition, the term "excessive insulation deterioration" is subjective.
COMMITTEE ACTION: Accept in Principle.
COMMITTEE STATEMENT: See Committee Action and Committee Statement on Proposal 73-48 and the Committee Statement on Proposal 73-50.
VOTE ON COMMITTEE ACTION: Unanimously Affirmative.

(Log # 82)

73- 50 - (2-2.3): Accept in Principle
SUBMITTER: Brian E. Rock, Hubbell, Inc.
RECOMMENDATION: Delete "excessive". Add "or physical damage" following "deterioration."
SUBSTANTIATION: "Excessive insulation deterioration" is not defined. Existing home inspection enforcement groups, i.e., the professional engineers and home inspectors presently conducting structural, insect, radon, etc., inspections on behalf of the mortgage companies or their guarantors (secondary mortgage market), must be provided with definitive requirements, not subject to changeable interpretations or subjective judgments. Section 2-2.3 requires a judgment call as to what constitutes "excessive insulation deterioration."
COMMITTEE ACTION: Accept in Principle.
COMMITTEE STATEMENT: See Proposal 73-48. The Committee does not agree with the substantiation.
See also Committee Action on Proposal 73-54. The Committee recognizes that the term "excessive" is subjective but feels it is necessary for proper application of this code.
VOTE ON COMMITTEE ACTION: Unanimously Affirmative.

(Log # 97)

73- 51 - (2-2.3): Accept in Principle
SUBMITTER: Michael J. Foley, Englewood, CO
RECOMMENDATION: Revise text to read as follows:
"Service entrance conductors shall not show evidence of excessive insulation or covering deterioration.
SUBSTANTIATION: Some service entrance conductors are covered, not insulated. Addition of "covering" addresses this type of installation.
COMMITTEE ACTION: Accept in Principle.
COMMITTEE STATEMENT: See Committee Action on Proposal 73-48.
VOTE ON COMMITTEE ACTION: Unanimously Affirmative.

(Log # 23)

73- 52 - (2-2.6): Reject
SUBMITTER: David E Shapiro, Safety First Electrical Contracting, Consulting and Safety Education
RECOMMENDATION: Add after "clearance" as follows: all doors shall swing freely at least 90°; all cover hardware shall be accessible and have at least 12 in. clear space directly in front of it; there shall be at least 24 in. clearance directly in front of all points of termination, after covers have been removed, and clearance from that space down to the floor.
SUBSTANTIATION: Without specificity, guidelines are of little value and invite capricious application. The most common problems with loadcenter access that I encounter in older buildings involve not being able to get a screwdriver at the cover screws or simply being crowded or perched over something such as a washing machine when trying to add a circuit breaker. This will address those problems.
COMMITTEE ACTION: Reject.
COMMITTEE STATEMENT: The proposal is even more extensive than the requirements of Section 110-16 in the National Electrical Code. The Committee felt that it was inappropriate to accept and incorporate such restrictive measures.
VOTE ON COMMITTEE ACTION:
AFFIRMATIVE: 14
NEGATIVE: Stead
EXPLANATION OF VOTE:
STEAD: I believe that the clearance issue should be addressed in some definitive way. Service equipment is sometimes observed installed in locations that are inappropriate. Homeowners tend to enclose and conceal service equipment such that inspection and service is difficult or impossible.

(Log # 24)

73- 53 - (2-2.7): Reject
SUBMITTER: David E Shapiro, Safety First Electrical Contracting, Consulting and Safety Education
RECOMMENDATION: Add text to read as follows:
"All hardware shall be present. Substitute hardware shall be substantially equivalent to original items."
SUBSTANTIATION: Missing screws and filler plates are common. Missing doors, less so. Sheet metal screws commonly substitute for machine screws, and standards screws for washerhead screws even where cover plates have quite large holes.
COMMITTEE ACTION: Reject.
COMMITTEE STATEMENT: See Committee Statement on Proposal 73-52.
VOTE ON COMMITTEE ACTION: Unanimously Affirmative.

(Log # CP4)

73- 54 - (2-2.7): Accept
SUBMITTER: Technical Committee on Electrical Systems Maintenance,
RECOMMENDATION: Revise 2-2.7 as follows:
"Service entrance equipment, cables, raceways, or conductors shall not show evidence of physical damages, corrosion or other deterioration."
SUBSTANTIATION: The Committee feels that the revision to Section 2-2.7 addresses the concerns of the submitter of Proposal 73-53.
COMMITTEE ACTION: Accept.
VOTE ON COMMITTEE ACTION: Unanimously Affirmative.

(Log # 38)

73- 55 - (2-2.8): Accept in Principle
SUBMITTER: Vernon Wright, Wright Home Inspection
RECOMMENDATION: Revise text to read as follows:
2-2.8 Service shall have properly sized grounding electrode conductor terminated and connected to an approved grounding electrode.
SUBSTANTIATION: 2-2.8 As currently written, assumes all services have a grounding electrode conductor. Some do not.
COMMITTEE ACTION: Accept in Principle.
Add a first sentence to read:
"Service equipment shall be grounded." Remainder of the section will remain as written.
COMMITTEE STATEMENT: Adding the new first sentence will ensure that a grounding electrode conductor will be provided and properly sized and terminated.
VOTE ON COMMITTEE ACTION: Unanimously Affirmative.

(Log # 63)

73- 56 - (2-3.1): Accept in Principle
SUBMITTER: Laurence Ward, NEMA
RECOMMENDATION: Add text to define the term "adequate clearance".
SUBSTANTIATION: This code may be implemented by non-electrical inspectors. The term "adequate clearance" should be defined well enough to preclude unsafe conditions. See Section 110-16 of NEC for clarification to this point.
COMMITTEE ACTION: Accept in Principle.
Revise section to read:
"Panelboards and distribution equipment shall be provided with adequate clearances that provide reasonable access."
COMMITTEE STATEMENT: The Committee believes the requirement for reasonable access satisfies the intent of the requirement.
VOTE ON COMMITTEE ACTION:
AFFIRMATIVE: 14
NEGATIVE: Smits
EXPLANATION OF VOTE:
SMITS: "Reasonable access" has not been defined nor can it be. I recommend it read, Panelboards and distribution equipment shall be provided with adequate clearances for operation and shall not have permanent portions of the building for finish preventing accessibility or operation.

(Log # 83)

73- 57 - (2-3.1): Accept in Principle
SUBMITTER: Brian E. Rock, Hubbell, Inc.
RECOMMENDATION: Define "adequate" quantitatively.
SUBSTANTIATION: How are "adequate clearances" defined, particularly to non-engineering inspectors? Clearances have been revised in different editions of NEC". Which are "adequate" for an installation of unknown vintage? Existing home inspection enforcement groups, i.e., the professional engineers and home inspectors presently conducting structural, insect, radon, etc., inspections on behalf of the mortgage companies or their guarantors (secondary mortgage market), must be provided with definitive requirements, not subject to changeable interpretations or subjective judgments.
COMMITTEE ACTION: Accept in Principle.
COMMITTEE STATEMENT: See Committee Action on Proposal 73-56.
VOTE ON COMMITTEE ACTION: Unanimously Affirmative.

(Log # 53)

73- 58 - (2-4): Accept in Principle
SUBMITTER: William J. Dain, Long Island Elect. Insp. Svc.
RECOMMENDATION: Add text to read as follows:
"Fuse panels shall be equipped with type S fuses if Edison base type are used."
SUBSTANTIATION: Common problem of over fusing convertors.
COMMITTEE ACTION: Accept in Principle.
Add a new Section 2-4.4 to read:
"Where evidence of overfusing or tampering of Edison-base type fuses exists, Type S, nontamperable adapters shall be installed."
COMMITTEE STATEMENT: The requirement for Type "S" nontamperable adapters satisfies the submitter's concerns.
VOTE ON COMMITTEE ACTION: Unanimously Affirmative.

(Log # CP5)

73- 59 - (2-4.2): Accept
SUBMITTER: Technical Committee on Electrical Systems Maintenance,
RECOMMENDATION: Delete Section 2-4.2 and renumber accordingly.
SUBSTANTIATION: The Committee after further consideration has decided to delete the section since the issue is beyond the intended scope.
COMMITTEE ACTION: Accept.
VOTE ON COMMITTEE ACTION: Unanimously Affirmative.

(Log # 98)

73- 60 - (2-4.2): Reject
SUBMITTER: Michael J. Foley, Englewood, CO
RECOMMENDATION: Revise text to read as follows:
"Cicuit breaker handle ties, if any shall be properly installed."
SUBSTANTIATION: Present wording implies there are handle ties on all installations.
COMMITTEE ACTION: Reject.
COMMITTEE STATEMENT: See Committee Proposal 73-59.
VOTE ON COMMITTEE ACTION: Unanimously Affirmative.

(Log # 27)

73- 61 - (2-4.2): Reject
SUBMITTER: David E Shapiro, Safety First Electrical Contracting, Consulting and Safety Education
RECOMMENDATION: Delete comma after "ties."
SUBSTANTIATION: Presently ungrammatical.
COMMITTEE ACTION: Reject.
COMMITTEE STATEMENT: See Committee Action on Committee Proposal 73-59.
VOTE ON COMMITTEE ACTION: Unanimously Affirmative.

(Log # 35)

73- 62 - (2-4.4 (New)): Accept in Principle
SUBMITTER: Ray C Mullin, Northbrook, IL
RECOMMENDATION: Add new text to read as follows:
"A disconnecting means shall be provided at each outdoor air conditioning or heat pump unit.
The overcurrent protection for the air-conditioning or heat pump unit shall be of the size and type as indicated on the nameplate of the unit."
SUBSTANTIATION: Section 110-3(b) requires that all equipment shall be installed per the instructions, listing, etc., etc.. UL 1995 spells out very clearly the type of overcurrent device . . . and size of overcurrent device to be installed ahead of the equipment. The nature of the testing and listing of the equipment is that if the nameplate states MAXIMUM SIZE FUSE . . . then fuses must be used. If the nameplate states MAXIMUM SIZE FUSE OR HACR TYPE BREAKER, then either may be used. Not to adhere and conform to what the nameplate states can lead to hazardous situations. Most inspectors are well aware of this requirement, but it needs to be clearly stated in this new standard. Sort of a mind-jogging check-off item.
COMMITTEE ACTION: Accept in Principle.
Reword proposal as follows and locate as new section 3-3.1:
"Appliances and utilization equipment shall have proper disconnecting means and overcurrent protection."
COMMITTEE STATEMENT: The Committee believes the revision of the proposed requirement satisfies the submitter's concerns.
VOTE ON COMMITTEE ACTION: Unanimously Affirmative.

(Log # 39)

73- 63 - (2-4.4 (New)): Accept in Principle
SUBMITTER: Vernon Wright, Wright Home Inspection
RECOMMENDATION: Add new text to read as follows:
2-4.4 Plug fuse overcurrent protective devices shall be replaced with Type-S nontamperable fuses properly rated for conductor ampacities..
SUBSTANTIATION: Ninety percent of the fused services I see have oversized fuses.
COMMITTEE ACTION: Accept in Principle.
COMMITTEE STATEMENT: See Committee Action on Proposal 73-58.
VOTE ON COMMITTEE ACTION: Unanimously Affirmative.

(Log # 50)

73- 64 - (2-4.4 (New)): Reject
SUBMITTER: James Pauley, Square D Co.
RECOMMENDATION: Add new Section 2-4.4 as follows:
2-4.4 Overcurrent devices shall be listed.
SUBSTANTIATION: We have seen much evidence of clone, counterfeit and non-listed overcurrent devices in electrical installations around the country. This requirement will clarify that only listed overcurrent devices are expected to be used in the equipment.
COMMITTEE ACTION: Reject.
COMMITTEE STATEMENT: This is an installation consideration. See Committee Statement on Proposal 73-42.
VOTE ON COMMITTEE ACTION:
AFFIRMATIVE: 14
NEGATIVE: Stead
EXPLANATION OF VOTE:
STEAD: Circuit breakers are available to unqualified persons who have no knowledge of installation requirements. Inappropriate circuit breakers are often discovered in service and distribution panelboards during the inspection process. I think that we should reconsider these proposals.

(Log # 51)

73- 65 - (2-4.5 (New)): Reject
SUBMITTER: James Pauley, Square D Co.
RECOMMENDATION: Add a new Section 2-4.5 as follows:
2-4.5 Overcurrent devices installed in the panelboard or distribution equipment shall be those which are indicated on the panelboard or distribution equipment labelings and instructions.
SUBSTANTIATION: It is important that only the overcurrent devices permitted by the panelboard or distribution equipment manufacturer be installed in the equipment to avoid potential safety hazards. We have had recent cases reported where field failures have resulted when substitute overcurrent devices were used in direct violation of the panel markings.
This requirement is also important so that proper series ratings are maintained in accordance with the equipment markings and listings.
Inspecting an installation and ignoring this critical part of the overall system protection scheme would be an error in our efforts to write a code which is to deal with hazards created after the initial construction.
COMMITTEE ACTION: Reject.
COMMITTEE STATEMENT: See Proposal 73-42.
VOTE ON COMMITTEE ACTION:
AFFIRMATIVE: 13
NEGATIVE: Smits, Stead
EXPLANATION OF VOTE:
SMITS: While I don't agree with the exact wording improper breakers are used or modified to fit in another manufacturers panel. Larger than accepted overcurrent protection devices are sometimes installed in conflict with the manufacturers accepted labeling instructions.
This is a hazard as much as bulbs that are not sized according to the recommendations.
STEAD: Circuit breakers are available to unqualified persons who have no knowledge of installation requirements. Inappropriate circuit breakers are often discovered in service and distribution panelboards during the inspection process. I think that we should reconsider these proposals.

(Log # 34)

73- 66 - (2-5): Reject
SUBMITTER: Derek Young, Parlin, NJ
RECOMMENDATION: Add new text to read as follows:
"Aluminum conductors shall be connected by means of a properly spliced copper pigtail with an anti-oxidizer added at splice."
SUBSTANTIATION: The unqualified overtime change their receptacles/switches with a regular copper approved type being unaware of the fire hazard which begins, which will eventually cause a breakdown at termination point leading to a fire. With this proposal the inspector can take notice when house is sold or repair etc. Since most receptacles are marked on back the inspector would have to remove receptacle from box to verify. With this proposal it is eliminated as well as fire hazard.
COMMITTEE ACTION: Reject.
COMMITTEE STATEMENT: Already covered in Sections 2-5.1 and 2-5.3.
VOTE ON COMMITTEE ACTION: Unanimously Affirmative.

(Log # 54)

73- 67 - (2-5): Reject
SUBMITTER: William J. Dain, Long Island Elect. Insp. Svc.
RECOMMENDATION: Add new text to read as follows:
"Copper to aluminum connections and "pigtailing" shall be done in an approved, or listed manner."
SUBSTANTIATION: Many residences have not been "pigtailed" or have been "pigtailed" using an unlisted procedure. The procedures not approved should not be allowed during reinspection unless certification was approved when work was performed.
COMMITTEE ACTION: Reject.
COMMITTEE STATEMENT: See Committee Statement on Proposal 73-66.
VOTE ON COMMITTEE ACTION: Unanimously Affirmative.

(Log # 25)

73- 68 - (2-5.1): Reject
SUBMITTER: David E Shapiro, Safety First Electrical Contracting, Consulting and Safety Education
RECOMMENDATION: Add after "devices." "Unless manufacturers' instructions present in an enclosure explicitly permit otherwise, only one conductor shall be connected to each terminal."
SUBSTANTIATION: This NFPA 70/UL rule is one of the most commonly violated in sloppy older work, and thus bears repeating in NFPA 73.
COMMITTEE ACTION: Reject.
COMMITTEE STATEMENT: See Proposal 73-66.
VOTE ON COMMITTEE ACTION: Unanimously Affirmative.

(Log # 99)

73- 69 - (2-5.4 (New)): Reject
SUBMITTER: Michael J. Foley, Englewood, CO
RECOMMENDATION: Add new Section to read as follows:
2-5.4 Aluminum conductors shall be properly terminated at a suitable device, listed for aluminum conductors. Splices shall be made in accordance with recognized and approved methods.
SUBSTANTIATION: Special problems may exist where aluminum branch circuit wiring is present. Attention to this situation is warranted.
COMMITTEE ACTION: Reject.
COMMITTEE STATEMENT: See Proposal 73-66.
VOTE ON COMMITTEE ACTION: Unanimously Affirmative.

(Log # 26)

73- 70 - (2-5.4 (New)): Reject
SUBMITTER: David E Shapiro, Safety First Electrical Contracting, Consulting and Safety Education
RECOMMENDATION: Add section with the following text:
"There shall be sufficient free conductor in all enclosures containing devices to permit removal of the devices sufficient for the examination of terminations.
SUBSTANTIATION: It may not be realistic to require 6 in. of free conductor, but it is a dangerous installation if we can't even inspect the connections. A reinspection code needs to be specific, and where it modifies - as it must - the more rigorous requirements of NFPA 70 it needs to establish common-sense standards for functionality and inspectability.
COMMITTEE ACTION: Reject.
COMMITTEE STATEMENT: See Proposal 73-42.
VOTE ON COMMITTEE ACTION: Unanimously Affirmative.

(Log # 13)

73- 71 - (2-6.3): Reject
SUBMITTER: David E Shapiro, Safety First Electrical Contracting, Consulting and Safety Education
RECOMMENDATION: Add text after "abuse" as follows: "as follows: any injury that has damaged the contained conductors or their insulation; any injury to the sheath or covering interfered with its weatherproof or conducting design; or any injury to the sheath or covering that does not permit its repair to where it offers approximately the same mechanical protection originally intended."
SUBSTANTIATION: Specificity minimizes capricious application.
COMMITTEE ACTION: Reject.
COMMITTEE STATEMENT: The Committee considers its recommendation minimizes capricious applications.
VOTE ON COMMITTEE ACTION: Unanimously Affirmative.

(Log # 8)

73- 72 - (2-7.1): Reject
SUBMITTER: Stanley R Cowan, Missouri Dept. of Health
RECOMMENDATION: Insert the following between the current proposed (3) and (4):
"(4) where laying on a floor and covered by a rug or other covering;" Then change current (4) to (5).
SUBSTANTIATION: To eliminate a safety hazard of tripping or to remove an unsightly condition, some people may cover an extension cord with a rug or snake a cord under carpeting. Unknowingly, they are creating a greater problem in their solution in that heat will not dissipate as readily from the now overly insulated extension cord and that the cord is now subjected to abrasion from people walking over the cord.
COMMITTEE ACTION: Reject.
COMMITTEE STATEMENT: The Committee feels that the text of Section 2-7.1 adequately addresses the concerns of the submitter.
See also Committee Action on Proposal 73-95.
VOTE ON COMMITTEE ACTION: Unanimously Affirmative.

(Log # 14)

73- 73 - (2-7.2): Accept in Principle
SUBMITTER: David E Shapiro, Safety First Electrical Contracting, Consulting and Safety Education
RECOMMENDATION: After "habitable rooms," add "they shall be removed." Capitalize "Such."
SUBSTANTIATION: Clarify that the existence of this section does not imply that zipcord can remain.
COMMITTEE ACTION: Accept in Principle.
COMMITTEE STATEMENT: See Committee Proposal 73-95.
See also Section 2-12 for cord removal requirement.
VOTE ON COMMITTEE ACTION:
AFFIRMATIVE: 14
NEGATIVE: Smits
EXPLANATION OF VOTE:
SMITS: It appears clear to me that the fixture cords or cables shall be removed by Section 2-7.1 and its statement. If we adopt this addition we could change our sentence structure for most of this code such as:
(a) Where plates are damaged they shall be replaced.
(b) Where receptacles have reversed polarity it shall be changed.
The point is, I believe it is clear that flexible cords should not remain as they are a hazard in some uses. This is our intent.

(Log # 15)

73- 74 - (2-8.3): Accept in Principle
SUBMITTER: David E Shapiro, Safety First Electrical Contracting, Consulting and Safety Education
RECOMMENDATION: Add after "damage" "affecting their ability to carry fault current or provide mechanical protection, or changing their cross-sections so as to damage the conductors enclosed."
SUBSTANTIATION: As this is now written, superficial rust would call for red-tagging rather than Red Devil.
COMMITTEE ACTION: Accept in Principle.
In Section 2-8.3, add word "excessive" between "of" and "deterioration."
COMMITTEE STATEMENT: The Committee feels this accommodates the proposer's concerns.
VOTE ON COMMITTEE ACTION: Unanimously Affirmative.

(Log # 16)

73- 75 - (2-9.3): Reject
SUBMITTER: David E Shapiro, Safety First Electrical Contracting, Consulting and Safety Education
RECOMMENDATION: Add at end, "Where enclosed incandescent fixtures do not list maximum wattage, a maximum lamp size of 60 watts shall be installed in medium base lampholders, and 25 watt in candelabra base lampholders."
SUBSTANTIATION: This is one of the areas of most egregious hazard in older buildings. We need some kind of guidelines. Perhaps the wattages should be 40 and 15. However, I know that many old fixtures don't handle 100 watt lamps without overheating.
COMMITTEE ACTION: Reject.
COMMITTEE STATEMENT: Although the Submitter may be accurate in his assumption, to limit the text of the section to specific wattage limitations would be inappropriate without substantial data to support such a limitation.
VOTE ON COMMITTEE ACTION: Unanimously Affirmative.

(Log # 64)

73- 76 - (2-9.3): Accept
SUBMITTER: Laurence Ward, NEMA
RECOMMENDATION: Add to end of sentence so to read:
"Where identified, fixtures shall be lamped in accordance with available instructions and shall not exceed marked maximum ratings."
SUBSTANTIATION: Adding this text helps to define the intent to provide safe lighting. Lamp loads should not exceed the fixture manufacturers instructions.
COMMITTEE ACTION: Accept.
VOTE ON COMMITTEE ACTION: Unanimously Affirmative.

(Log # 84)

73- 77 - (2-9.3): Accept
SUBMITTER: Brian E. Rock, Hubbell, Inc.
RECOMMENDATION: Add to the end of the sentence:
. . . lamped in accordance with available instructions and "shall not exceed marked maximum ratings."
SUBSTANTIATION: Compliance with relamping cautions should be verified.
COMMITTEE ACTION: Accept.
VOTE ON COMMITTEE ACTION: Unanimously Affirmative.
COMMENT ON VOTE:
STEAD: I agree with the proposal and the vote but I'd like to suggest that the requirement should be expanded to add the words "installed and" before lamped to read: Where identified, fixtures shall be installed and lamped in accordance with available instructions.
This change would require inspections to include improperly installed fixtures such as recessed fixtures with inadequate clearance to combustible material, exposed incandescent lamps in shower stalls, etc.

(Log # 85)

73- 78 - (2-9.4): Accept
SUBMITTER: Brian E. Rock, Hubbell, Inc.
RECOMMENDATION: Add "or terminals and branch circuit conductors" and "for polarization" to the sentence to read:
"Where fixture tap conductors or terminals and branch circuit conductors are identified for polarization, fixture connections shall be properly polarized."
SUBSTANTIATION: Either ambiguous as written or mandating retroactive compliance with a later edition of the NEC" without deterioration or damage justification.
Per NFPA 70 NEC", "identified" is defined as "recognizable as suitable for the specific purpose, function, use, environment, application, etc." What is intended is terminal polarization, which may be on the fixture's tap conductors or terminals.
Fixture polarization identification alone is insufficient. Homes built before 1930, especially those with knob-and-tube wiring, are typically unpolarized. In the absence of deterioration, would these residences have to be rewired? Therefore, the branch circuit wiring must also be identified for polarization.
COMMITTEE ACTION: Accept.
VOTE ON COMMITTEE ACTION: Unanimously Affirmative.

(Log # CP6)

73- 79 - (2-9.5): Accept
SUBMITTER: Technical Committee on Electrical Systems Maintenance,
RECOMMENDATION: In Section 2-9.5 insert "proper" between "have" and "clearance" to read as follows:
"Open incandescent lamps, installed in clothes closets shall have proper clearance from combustible materials."
SUBSTANTIATION: Clarifies the intent.
COMMITTEE ACTION: Accept.
VOTE ON COMMITTEE ACTION: Unanimously Affirmative.

(Log # 2)

73- 80 - (2-9.5): Reject
SUBMITTER: Edward Morris, O.C. Construction Dept.
RECOMMENDATION: Revise text to read as follows:
"Open incandescent lamps installed in clothes closets shall have 18 in. clearance from combustible materials."
SUBSTANTIATION: No minimum clearance stated 18 in. minimum clearance was standard in previous electrical codes (1987 NEC NFPA 70).
COMMITTEE ACTION: Reject.
COMMITTEE STATEMENT: The Committee believes that stating a specific dimension creates an enforcement problem.
VOTE ON COMMITTEE ACTION: Unanimously Affirmative.

(Log # 17)

73- 81 - (2-9.5): Reject
SUBMITTER: David E Shapiro, Safety First Electrical Contracting, Consulting and Safety Education
RECOMMENDATION: Add after "materials" "provided by guards, except where the lampholder location otherwise complies with the rules in Section 410-8 of the NFPA 70."
SUBSTANTIATION: "Clearance" is not specific. A screw-on cage is a cheap, minimal solution to the problem posed by open lamps.
COMMITTEE ACTION: Reject.
COMMITTEE STATEMENT: See Proposals 73-82 and 73-79.
VOTE ON COMMITTEE ACTION: Unanimously Affirmative.

(Log # 55)

73- 82 - (2-9.5): Reject
SUBMITTER: William J. Dain, Long Island Elect. Insp. Svc.
RECOMMENDATION: Revise text to read as follows:
"Open incandescent lamps and switches installed in clothes closets shall be prohibited and clearance from combustible materials ensured."
SUBSTANTIATION: Fire hazard caused by pull chain lights within closets, or open bulb fixtures too close to shelves. If moving is impractical then removal should be done.
COMMITTEE ACTION: Reject.
COMMITTEE STATEMENT: The Committee does not agree with the submitter in the presumption that all pull chain and open lamp fixtures constitute a hazard sufficient for ordering removal of such equipment, in all cases.
VOTE ON COMMITTEE ACTION: Unanimously Affirmative.

(Log # CP7)

73- 83 - (2-9.5 Note): Accept
SUBMITTER: Technical Committee on Electrical Systems Maintenance,
RECOMMENDATION: Relocate note to follow Section 2-9.4.
SUBSTANTIATION: To locate in a more appropriate location.
COMMITTEE ACTION: Accept.
VOTE ON COMMITTEE ACTION: Unanimously Affirmative.

(Log # 18)

73- 84 - (2-9.6 (New)): Reject
SUBMITTER: David E Shapiro, Safety First Electrical Contracting, Consulting and Safety Education
RECOMMENDATION: Add a new section to read as follows:
"All indoor fluorescent fixtures, except those with simple reactance ballasts, shall have thermal protection integral within the ballast."
SUBSTANTIATION: I'm still replacing smoking, non-TP ballasts. They're at least 30 years old. They're dangerous. Let's stop waiting from them to fry.
COMMITTEE ACTION: Reject.
COMMITTEE STATEMENT: See Committee Statement on Proposal 73-42.
VOTE ON COMMITTEE ACTION: Unanimously Affirmative.

(Log # CP8)

73- 85 - (2-10, 2-10.2, 2-10.3): Accept
SUBMITTER: Technical Committee on Electrical Systems Maintenance,
RECOMMENDATION: Revise Sections 2-10, 2-10.2 and 2-10.3 to read as follows:
"2-10 Boxes and Similar Enclosures"
"2-10.2 Boxes Covers and Similar Enclosures ..."
"2-10.3 Boxes and similar enclosures installed in damp locations shall be so placed or equipped as to prevent moisture from entering or accumulating."
SUBSTANTIATION: To include all enclosures in the requirement.
COMMITTEE ACTION: Accept.
VOTE ON COMMITTEE ACTION: Unanimously Affirmative.

(Log # 86)

73- 86 - (2-10.2): Accept in Principle in Part
SUBMITTER: Brian E. Rock, Hubbell, Inc.
RECOMMENDATION: Replace "Boxes" with "Enclosures" in the sentence to read as follows:
"Enclosures and covers installed in wet locations shall be identified for the purpose."
Add a second sentence: "Enclosures designated as Types 3, 3R, 3S, 4, 4X, 6, or 6P shall be considered as suitable for the purpose."
SUBSTANTIATION: Covers for wet locations are typically identified (marked) for the purpose. Boxes are typically not. Also, enclosures are frequently marked with Type designations (3R, 4X, etc.); without cross-reference here, will existing home inspectors recognize these Type designations as being identified for the purpose.
COMMITTEE ACTION: Accept in Principle in Part.
Accept the inclusion of the word, "enclosures".
This action occurs in Committee Proposal 73-85.
Reject the rest of the recommendation.
COMMITTEE STATEMENT: The Committee feels they have addressed the concerns of the proposer by changing the title and including the word "enclosures" in Section 2-10.2 and 2-10.3. The Committee however disagrees with the addition of superfluous information such as types of enclosures.
VOTE ON COMMITTEE ACTION: Unanimously Affirmative.

(Log # 65)

73- 87 - (2-10.5): Reject
SUBMITTER: Laurence Ward, NEMA
RECOMMENDATION: "To preclude removal of a grounding device upstream, add a sentence to read as follows:
"Continuity of the equipment grounding conductor shall not be disrupted."
SUBSTANTIATION: Many older residences utilized water piping as a grounding source. As these residences are renovated metal pipe is replaced by PVC and CPVC, and as a result continuity goes unchecked. Adding this sentence to the Reinspection Code calls attention to a major safety issue.
COMMITTEE ACTION: Reject.
COMMITTEE STATEMENT: See Committee Statement on Proposal 73-42.
VOTE ON COMMITTEE ACTION: Unanimously Affirmative.

(Log # 87)

73- 88 - (2-10.5): Reject
SUBMITTER: Brian E. Rock, Hubbell, Inc.
RECOMMENDATION: Add a second sentence to read as follows:
"Continuity of the equipment grounding conductor shall not be disrupted."
SUBSTANTIATION: To cover removal of a grounding device from an "upstream" box.
COMMITTEE ACTION: Reject.
COMMITTEE STATEMENT: See Committee Statement on Proposal 73-42.
VOTE ON COMMITTEE ACTION: Unanimously Affirmative.

(Log # 40)

73- 89 - (2-11.6): Accept in Principle in Part
SUBMITTER: Vernon Wright, Wright Home Inspection
RECOMMENDATION: Revise text to read as follows:
2-11.6 Receptacles shall be wired with proper polarity, and all grounding type receptacles shall be properly grounded or have adequate GFCI protection.
SUBSTANTIATION: Retrofitted grounding type receptacles without grounding is probably the most common electrical deficiency found in existing housing more than thirty years old.
COMMITTEE ACTION: Accept in Principle in Part.
Accept last part of the recommendation "all grounding type receptacles should be grounded" and add as a second sentence.
Reject the rest of the recommendation.
COMMITTEE STATEMENT: Committee does not agree that all receptacles should be wired with proper polarity such as in cases where branch circuits are not polarized. See Committee Action on Proposal 73-90.
The Committee does agree that all grounded type receptacles should be properly grounded or have adequate GFCI protection.
VOTE ON COMMITTEE ACTION: Unanimously Affirmative.

(Log # 88)

73- 90 - (2-11.6): Accept
SUBMITTER: Brian E. Rock, Hubbell, Inc.
RECOMMENDATION: Add "Where receptacle terminals and branch circuit conductors are identified for polarization" to the sentence to read as follows:
"Where receptacle terminals and branch circuit conductors are identified for polarization, receptacles shall be properly polarized."
SUBSTANTIATION: As written, the Draft requirement mandates retroactive compliance with a later edition of the NEC" without deterioration or damage justification.
Homes built before 1930, especially those with knob-and-tube wiring, are typically unpolarized. In the absence of deterioration, would these residences have to be rewired? Therefore, the branch circuit wiring and receptacle terminals must be identified for polarization.
COMMITTEE ACTION: Accept.
VOTE ON COMMITTEE ACTION: Unanimously Affirmative.

(Log # 89)

73- 91 - (2-11.7): Reject
SUBMITTER: Brian E. Rock, Hubbell, Inc.
RECOMMENDATION: Define or quantify "acceptable blade retention."
SUBSTANTIATION: Since there are no Listed receptacle contact retention testers, how is "acceptable blade retention" defined, particularly to non-engineering inspectors? Existing home inspection enforcement groups, i.e., the professional engineers and home inspectors presently conducting structural, insect, radon, etc. inspection on behalf of the mortgage companies or their guarantors (secondary mortgage market), must be provided with definitive requirements. The unlisted "fish-scale" retention testers do not provide repeatable results nor, in the hands of a careless individual, are they always safe to the test performer.
COMMITTEE ACTION: Reject.
COMMITTEE STATEMENT: The express purpose of the text "listed retention tester" is to encourage development and manufacture of a tester which will be listed to an acceptable standard. The Committee feels that one of the more significant potential hazards is the much used receptacle which has lost its blade retention being used to supply a load at the upper limits of its capacity.
Acceptable blade retention will be determined by a test probe or the like, the test value of which belongs in a product or test standard and not in a Code. A Standards development and testing laboratory such as Underwriters Laboratories develops suitable values with input from industry, inspection authorities, and other interested parties.
VOTE ON COMMITTEE ACTION:
AFFIRMATIVE: 14
NEGATIVE: Smits
EXPLANATION OF VOTE:
SMITS: While it is recognized that loose blades can be a cause of fire it also should be acknowledged that the outlets that generally have this problem will be ones used the most or have a larger wattage item attached.
The inspector will typically inspect occupied homes and would be accepting tremendous responsibility if he makes it a practice of disconnecting items presently attached to a receptacle. The proposal is therefore virtually unenforceable and the litigation in follow up after a fire, allegedly caused by this problem will be a joke of "me" vs. "he."
The Committee statement, is also not within the scope or intent of our document. If it comes down to this then we should start checking resistance through the system.

(Log # 66)

73- 92 - (2-11.8): Reject
SUBMITTER: Laurence Ward, NEMA
RECOMMENDATION: To preclude use of incandescent dimmers with fluorescent lamps, add a new sentence to read as follows:
"Dimmers shall be suitable for the type of connected load and shall not be installed on switched receptacle circuits."
SUBSTANTIATION: Incandescent dimmers are readily available to consumers. These units are often utilized in "upgrading" a residence. With the introduction of compact fluorescent lighting units with Edison base and integral ballast the incorrect application of dimming products has increased.
COMMITTEE ACTION: Reject.
COMMITTEE STATEMENT: See Proposal 73-42.
VOTE ON COMMITTEE ACTION:
AFFIRMATIVE: 14
NEGATIVE: Wells

EXPLANATION OF VOTE:
WELLS: The Technical Committee rejected this proposal on the basis that it constituted an installation requirement not contained in the NEC. The proposal was made for the reason that dimmers are, largely, an after-market product installed by home owners to replace a switch. The switch may well have controlled a receptacle. The proposal may have understated the potential problem in its substantiation which related primarily to Edison base fluorescent ballasts. The use of the receptacle for appliances such as vacuum cleaners could lead to overheating and failure of the dimmer or appliance. We recommend acceptance of the proposal as submitted.

(Log # 90)

73-93 - (2-11.8): Reject
SUBMITTER: Brian E. Rock, Hubbell, Inc.
RECOMMENDATION: Add a second sentence to read as follows:
"Dimmers shall be suitable for the type of connected load and shall not be installed on switched receptacle circuits."
SUBSTANTIATION: To preclude fluorescent lamps (particularly Edison base with integral ballast) on incandescent dimmers and dimmers from controlling switched receptacles.
COMMITTEE ACTION: Reject.
COMMITTEE STATEMENT: See Proposal 73-42.
VOTE ON COMMITTEE ACTION:
AFFIRMATIVE: 14
NEGATIVE: Wells
EXPLANATION OF VOTE:
WELLS: See negative comment on Proposal 73-92.

(Log # 19)

73-94 - (2-11.9 (New)): Reject
SUBMITTER: David E Shapiro, Safety First Electrical Contracting, Consulting and Safety Education
RECOMMENDATION: Add new text to read as follows:
"Where grounding-type receptacles have been installed on circuits without a grounding conductor by utilizing the exception to NEC 250-50, a permanent placard shall be affixed in the vicinity of the main water cut-off with the following or equivalent text: "DANGER — ELECTRIC CIRCUITS HAVE BEEN GROUNDED TO THE METAL COLD WATER PIPES. INTERRUPTING THEIR CONTINUITY BY INSTALLING NON-METALLIC FITTINGS OR PIPE COULD RESULT IN ELECTROCUTION."
SUBSTANTIATION: Older homes such as have ungrounded cables often have deteriorating plumbing pipes. These are liable to undergo repairs that use of PVC, CPVC, and polybutylene. It is our responsibility to let plumbers know when electricians have engaged in an unusual procedure that could shock them or cause them to shock homeowners.
COMMITTEE ACTION: Reject.
COMMITTEE STATEMENT: See Proposal 73-42.
Also, the proposal refers to an exception to Section 250-50 of the NEC and is much more restrictive than that document. The intent is to provide a stand alone document, only referring to the NEC where remedial work is required.
VOTE ON COMMITTEE ACTION: Unanimously Affirmative.

(Log # CP9)

73-95 - (2-7.2, 2-12 through 2-17): Accept
SUBMITTER: Technical Committee on Electrical Systems Maintenance,
RECOMMENDATION: Delete Section 2-7.2
Delete 2-12 through 2-17 and create a new 2-12 as follows:
2-12 Where flexible cords or cables are used as a substitute for fixed wiring to supply outlets in rooms or areas, such r ooms or areas shall be considered to have inadequate outlets. Such flexible cords shall be removed.
NOTE: See Section 2-7.1.
SUBSTANTIATION: This is a maintenance code for existing systems not a minimum standard therefore the Committee has revised the text accordingly.
COMMITTEE ACTION: Accept.
VOTE ON COMMITTEE ACTION:
AFFIRMATIVE: 13
NEGATIVE: Smits, Wells
EXPLANATION OF VOTE:
SMITS: See 73-73 comment.
WELLS: We believe the proposed wording is correct, but does not go far enough. Flexible cords or cables used as a substitute for fixed wiring are a clearly recognized hazard and should be removed. However, removing them does not address the root problem. It merely invites their return.
We submit the following additional wording at the end of the second sentence.
"and shall be replaced with permanently installed receptacles using and approved wiring method."
Existing Model Building Codes, State and Local minimum building codes and the NEC all define various requirements concerning installation specifics. The authority having jurisdiction, therefore has ample guidance in determining how many and where receptacle should be installed.
The choice of wiring method permitted by the NEC also allows for selection, one that will best fit the specific situation. Surface raceways are but one option.
This code will be incomplete if it recognizes the hazard of improper use of cords and cables, but does not require their replacement with a proper wiring method.
We also disagree with the Committee's substantiation. This is not a maintenance code. It is an inspection protocol which requires remedial action in accordance with the NEC and other applicable codes.

(Log # 36)

73-96 - (2-12, 2-13, 2-14, and 2-16): Accept in Principle
SUBMITTER: Joe Renk, Philadelphia, PA
RECOMMENDATION: Delete Articles 2-12, 2-13, 2-14, and 2-16.
SUBSTANTIATION: The intent of the Code is to evaluate EXISTING AND INSTALLED ELECTRICAL SYSTEMS. Articles listed above require if not existing "TO INSTALL" in these location. This is a contradiction to the intent of this NFPA 73.
I welcome this mandatory requirement of NFPA 73. I feel we need an standardize requirement for reinspection of 1-family and 2-family dwellings in the electrical community.
However, after reading over NFPA 73, I have noticed in Article 1-1 the code refers to evaluating "EXISTING & INSTALLED" electrical systems. Further reading of this draft it continues to say "It is not the intent of this code to define installation requirement that may be desired for convenience or utilitarian purposes."
As stated in Articles 2-12, 2-13, 2-14, and 2-16 in this code it is saying "shall be provided and shall supply." My interpretation of this code draft is to cover "existing and installed" electric systems. These articles are telling me to install as needed. If there is not existing outlet, then how can it be a hazard? The other articles seem to cover the main objective in potential safety and fire hazard.
Finally, in my experience as an electrical contractor I have seen with existing wall configurations it isn't always cost effective to install these extra receptacles in the "habitable rooms" on the 2nd and 3rd floors of city row homes without substantial cost. This code would be applied to real estate transactions of the selling of a house. These articles as stated above would put additional cost of extras on the seller who may not be prepared to supply in the deal.
Thank you for the opportunity to voice my concerns in this matter.
COMMITTEE ACTION: Accept in Principle.
COMMITTEE STATEMENT: See Committee Action on Proposal 73-95.
VOTE ON COMMITTEE ACTION: Unanimously Affirmative.

(Log # 43)

73-97 - (2-12): Reject
SUBMITTER: John E. Gathergood, Fort Gratiot Township
RECOMMENDATION: Revise text as follows:
"Each habitable room shall be provided with a switched lighting outlet or duplex receptacle. A minimum of one (1) duplex receptacle shall be provided on each wall."
SUBSTANTIATION: I feel that this is a must to try to eliminate the use of illegal extension cords. Our area has experienced a lot of fires due to this cause.
COMMITTEE ACTION: Reject.
COMMITTEE STATEMENT: The submitter's concerns regarding use of extension cords are satisfied by the revision of Section 2-12 in Proposal 73-95 which will require the addition of receptacles and the removal of the extension cords.
VOTE ON COMMITTEE ACTION: Unanimously Affirmative.

(Log # 105)

73-98 - (2-12): Reject
SUBMITTER: Richard Widera, FL Chapter/Int'l Assoc. of Electrical Inspectors
RECOMMENDATION: Preface second sentence with the words "In addition."

SUBSTANTIATION: Will prevent spurious interpretation of a switched receptacle being counted as one of the two minimum receptacles required.
COMMITTEE ACTION: Reject.
COMMITTEE STATEMENT: See Committee Action and Committee Statement on Proposal 73-95.
VOTE ON COMMITTEE ACTION: Unanimously Affirmative.

(Log # 113)

73- 99 - (2-12): Accept in Principle
SUBMITTER: James M. Daly, Upper Saddle River, NJ
RECOMMENDATION: Delete the first sentence which reads:
"Each habitable room shall be provided with a switched lighting outlet or receptacle."
SUBSTANTIATION: This is not a requirement for electrical safety.
COMMITTEE ACTION: Accept in Principle.
COMMITTEE STATEMENT: See Committee Action and Committee Statement on Proposal 73-95.
VOTE ON COMMITTEE ACTION: Unanimously Affirmative.

(Log # 3)

73- 100 - (2-13): Reject
SUBMITTER: Edward Morris, O.C. Construction Dept.
RECOMMENDATION: Revise text to read as follows:
"A minimum of two 20 amp circuits shall supply at least two kitchen countertop receptacles."
SUBSTANTIATION: A plethora of kitchen appliances now exists to overload even modern kitchens.
COMMITTEE ACTION: Reject.
COMMITTEE STATEMENT: See Committee Action and Committee Statement on Proposal 73-95.
VOTE ON COMMITTEE ACTION: Unanimously Affirmative.

(Log # 10)

73- 101 - (2-13): Reject
SUBMITTER: Jamie McNamara, Hasting, MN
RECOMMENDATION: Revise text to read as follows:
2-13 Each kitchen shall be provided with a switched lighting outlet. A minimum of one 20 amp circuit shall supply at least two readily accessible receptacles in the kitchen.
SUBSTANTIATION: At least one if not both of the required kitchen receptacles should be readily accessible for small appliances and the like. (Add definition of readily accessible to 1-4.1 as shown on separate proposal.)
COMMITTEE ACTION: Reject.
COMMITTEE STATEMENT: See Committee Action and Committee Statement on Proposal 73-95.
VOTE ON COMMITTEE ACTION: Unanimously Affirmative.

(Log # 44)

73- 102 - (2-13): Reject
SUBMITTER: John E. Gathergood, Fort Gratiot Township
RECOMMENDATION: Revise text to read as follows:
"Each kitchen shall be provided with a switched light. Switch shall be located for convenience. A minimum of one 20 ampere circuit supplying a minimum of three (3) grounding-type duplex receptacle outlets. Two of these receptacles shall be readily accessible for portable appliances."
SUBSTANTIATION: With my experience on inspection, I find that this will meet a minimum standard. It does provide a margin of safety in the kitchen area.
COMMITTEE ACTION: Reject.
COMMITTEE STATEMENT: See Committee Action and Committee Statement on Proposal 73-95.
VOTE ON COMMITTEE ACTION: Unanimously Affirmative.

(Log # 91)

73- 103 - (2-13): Reject
SUBMITTER: Brian E. Rock, Hubbell, Inc.
RECOMMENDATION: Revise the second sentence to read as follows:
"A minimum of two receptacles shall supply the kitchen, excluding the refrigerator receptacle."
SUBSTANTIATION: Older homes may have only a 15 amp kitchen circuit. In the absence of deterioration, would these residences have to be rewired? Homes in some regions per local Code have 15 amp duplex kitchen receptacles multi-wired (3-wire plus ground) to 15 amp common trip circuit breakers to achieve the same goal as having two 20 amp kitchen circuits. (This multi-wired arrangement is required in Canada and may become a binational harmonization issue, as well.)
COMMITTEE ACTION: Reject.
COMMITTEE STATEMENT: See Committee Action and Committee Statement on Proposal 73-95.
VOTE ON COMMITTEE ACTION: Unanimously Affirmative.

(Log # 107)

73- 104 - (2-13): Accept in Principle
SUBMITTER: James M. Daly, Upper Saddle River, NJ
RECOMMENDATION: Delete first sentence which reads:
"Each kitchen shall be provided with a switched lighting outlet."
SUBSTANTIATION: A switched lighting outlet is not required for electrical safety.
COMMITTEE ACTION: Accept in Principle.
COMMITTEE STATEMENT: See Committee Action and Committee Statement on Proposal 73-95.
VOTE ON COMMITTEE ACTION: Unanimously Affirmative.

(Log # 1)

73- 105 - (2-14): Reject
SUBMITTER: Edward Morris, O.C. Construction Dept.
RECOMMENDATION: Revise text to read as follows:
"A minimum of one ground fault protected receptacle shall be provided."
SUBSTANTIATION: Ground fault protection must be provided in bathrooms. They are inexpensive, easily installed and save lives.
COMMITTEE ACTION: Reject.
COMMITTEE STATEMENT: See Committee Action and Committee Statement on Proposal 73-95 and Committee Action on Proposal 73-89.
VOTE ON COMMITTEE ACTION: Unanimously Affirmative.

(Log # 12)

73- 106 - (2-14): Reject
SUBMITTER: David E Shapiro, Safety First Electrical Contracting, Consulting and Safety Education
RECOMMENDATION: Add at end: "Unless it is part of a lighting fixture, where the receptacle is adjacent to a basin, shower or bathtub it shall have gfci protection."
SUBSTANTIATION: These are the locations where unprotected outlets are most dangerous. Exempting outlets that are part of light fixtures avoids undue hardship. Surely this is as important as say, 2-16: 20 amp circuits for the laundry.
COMMITTEE ACTION: Reject.
COMMITTEE STATEMENT: See Committee Action and Committee Statement on Proposal 73-42 and Committee Action on Proposal 73-89.
VOTE ON COMMITTEE ACTION: Unanimously Affirmative.

(Log # 41)

73- 107 - (2-14): Reject
SUBMITTER: Vernon Wright, Wright Home Inspection
RECOMMENDATION: Revise text to read as follows:
2-14 Each bathroom shall be provided with a switched lighting outlet. A minimum of one receptacle shall be provided and all receptacle outlets in baths shall have functional GFCI protection.
SUBSTANTIATION: The safety provided by protecting bath outlets with GFCI far outweighs the relatively minor cost.
COMMITTEE ACTION: Reject.
COMMITTEE STATEMENT: See Committee Action and Committee Statement on Proposal 73-95.
VOTE ON COMMITTEE ACTION: Unanimously Affirmative.

(Log # 45)

73- 108 - (2-14): Reject
SUBMITTER: John E. Gathergood, Fort Gratiot Township
RECOMMENDATION: Revise text to read as follows:
"Each bathroom shall be provided with a switched lighting outlet and a duplex receptacle shall be provided separate from the light fixture, adjacent to the wash basin not more than 48 in. from the basin."

SUBSTANTIATION: We should use duplex receptacles. They are much cheaper than single receptacles. With this language it will tell where that duplex receptacle shall be installed, not in a light fixture.
COMMITTEE ACTION: Reject.
COMMITTEE STATEMENT: See Committee Action and Committee Statement on Proposals 73-95 and 73-42.
VOTE ON COMMITTEE ACTION: Unanimously Affirmative.

(Log # 108)

73- 109 - (2-14): Reject
SUBMITTER: James M. Daly, Upper Saddle River, NJ
RECOMMENDATION: Revise text to read as follows:
"Each bathroom shall be provided with a minimum of one receptacle."
SUBSTANTIATION: A switched lighting outlet is not required for electrical safety.
COMMITTEE ACTION: Reject.
COMMITTEE STATEMENT: See Committee Action and Committee Statement on Proposal 73-95.
VOTE ON COMMITTEE ACTION: Unanimously Affirmative.

(Log # 46)

73- 110 - (2-15): Reject
SUBMITTER: John E. Gathergood, Fort Gratiot Township
RECOMMENDATION: Revise text to read as follows:
"Each basement shall be provided with a minimum of one lighting outlet for each 200 sq ft or major fraction of area for general illumination and install one duplex receptacle outlet on the wall."
SUBSTANTIATION: I find that there is only one lighting outlet, that is usually a pull chain lighting fixture with a plug on it.
COMMITTEE ACTION: Reject.
COMMITTEE STATEMENT: See Committee Action and Committee Statement on Proposal 73-95.
VOTE ON COMMITTEE ACTION: Unanimously Affirmative.

(Log # 47)

73- 111 - (2-16): Reject
SUBMITTER: John E. Gathergood, Fort Gratiot Township
RECOMMENDATION: Revise text to read as follows:
"Laundry areas shall have illumination and a 20 ampere branch circuit shall supply a grounding type duplex receptacle."
SUBSTANTIATION: There are at least two appliances used here: such as Gas Dryer and Washing Machine. Therefore, we need a duplex receptacle.
COMMITTEE ACTION: Reject.
COMMITTEE STATEMENT: See Committee Action and Committee Statement on Proposal 73-95.
VOTE ON COMMITTEE ACTION: Unanimously Affirmative.

(Log # 67)

73- 112 - (2-16): Reject
SUBMITTER: Laurence Ward, Washington, DC
RECOMMENDATION: The term "laundry area" should be defined, or a defined light level specified for this area.
SUBSTANTIATION: Some laundry areas are unilluminated closets adjoining illuminated rooms, and thus are adequately illuminated.
COMMITTEE ACTION: Reject.
COMMITTEE STATEMENT: See Committee Action and Committee Statement on Proposal 73-95.
VOTE ON COMMITTEE ACTION: Unanimously Affirmative.

(Log # 92)

73- 113 - (2-16): Reject
SUBMITTER: Brian E. Rock, Hubbell, Inc.
RECOMMENDATION: Revise text to read as follows:
"Laundry areas shall have illumination; unilluminated closets containing laundry appliances shall open upon illuminated areas."
SUBSTANTIATION: "Laundry areas" is not defined to existing home inspection professionals unfamiliar with NEC" interpretations. Some laundry areas are unilluminated closets adjoining illuminated rooms, and thus are adequately illuminated.
COMMITTEE ACTION: Reject.
COMMITTEE STATEMENT: See Committee Action and Committee Statement on Proposal 73-95.
VOTE ON COMMITTEE ACTION: Unanimously Affirmative.

(Log # 68)

73- 114 - (2-17): Reject
SUBMITTER: Laurence Ward, NEMA
RECOMMENDATION: Change "Stairways" to read "Stairways or stairway landings. . .".
SUBSTANTIATION: The additional wording helps to define the intent of this provision. This wording brings the Reinspection Code in better alignment with the NEC.
COMMITTEE ACTION: Reject.
COMMITTEE STATEMENT: See Committee Action and Committee Statement on Proposal 73-95.
VOTE ON COMMITTEE ACTION: Unanimously Affirmative.

(Log # 93)

73- 115 - (2-17): Reject
SUBMITTER: Brian E. Rock, Hubbell, Inc.
RECOMMENDATION: Revise the sentence to read as follows:
"Stairways or stairway landings shall be provided with a switched lighting outlet."
SUBSTANTIATION: "Stairways" is not fully definitive to existing home inspection professionals unfamiliar with NEC" interpretations.
COMMITTEE ACTION: Reject.
COMMITTEE STATEMENT: See Committee Action and Committee Statement on Proposal 73-95.
VOTE ON COMMITTEE ACTION: Unanimously Affirmative.

(Log # 4)

73- 116 - (2-18 (New)): Reject
SUBMITTER: Stanley R Cowan, Missouri Dept. of Health
RECOMMENDATION: Add a new section to read as follows:
2-18 Ground-Fault Circuit-Interrupter (GFCI) Protection
2-18.1 Receptacles installed in bathrooms shall have GFCI protection.
2-18.2 Receptacles installed in garages shall have GFCI protection (unless receptacles are not readily accessible or are for appliances occupying dedicated space.)
2-18.3 Receptacles installed outdoors where there is direct grade level access to the dwelling unit and to the receptacles shall have GFCI protection.
2-18.4 Receptacles located within 20 ft of the inside walls of a swimming pool shall be protected by a GFCI.
SUBSTANTIATION: Danger of electrocution has been long recognized wherever wet or damp locations exist in the proximity of electricity. The problem is magnified if there is a possibility the electrical system may have added to or modified by a "do-it-yourself" homeowner or landlord that may have not properly grounded the addition or modification. Additionally, even with properly ground circuits, the overcurrent protection device may not act quickly enough to prevent a sever or fatal shock from occurring (such as dropping a hair dryer into a bathtub.)
COMMITTEE ACTION: Reject.
COMMITTEE STATEMENT: See Committee Action and Committee Statement on Proposal 73-42 and Committee Action on Proposal 73-89.
VOTE ON COMMITTEE ACTION: Unanimously Affirmative.

(Log # 106)

73- 117 - (2-18 (New)): Reject
SUBMITTER: Richard Widera, FL Chapter/Int'l Assoc. of Electrical Inspectors
RECOMMENDATION: Add new text as follows:
"HVAC equipment shall have proper lighting and convenience receptacles available in proximity to equipment according to NFPA 70 standards."
SUBSTANTIATION: Establishes a consistency standard of safety concern for equipment servicing personnel with those standards as exist in NFPA 70.
COMMITTEE ACTION: Reject.
COMMITTEE STATEMENT: See Proposal 73-95.
VOTE ON COMMITTEE ACTION: Unanimously Affirmative.

(Log # 69)

73- 118 - (3-3): Reject
SUBMITTER: Laurence Ward, NEMA
RECOMMENDATION: Delete Section 3-3 "Appliances and Utilization Equipment."

SUBSTANTIATION: This section is inconsistent with Section 1-1 which explicitly excludes inspection of appliances and other utilization equipment from this Reinspection Code.
COMMITTEE ACTION: Reject.
COMMITTEE STATEMENT: Section 3-3 is not in conflict with Section 1-1 because Section 1-1 exempts the appliance itself and Section 3-3 addresses the installation and connection of such appliances.
VOTE ON COMMITTEE ACTION: Unanimously Affirmative.

(Log # 94)

73-119 - (3-3): Reject
SUBMITTER: Brian E. Rock, Hubbell, Inc.
RECOMMENDATION: Delete the entire Section.
SUBSTANTIATION: Inconsistent with Section 1-1, which explicitly excludes inspection of appliances and other utilization equipment from this Reinspection Code.
COMMITTEE ACTION: Reject.
COMMITTEE STATEMENT: See Committee Action and Committee Statement on Proposal 73-118.
VOTE ON COMMITTEE ACTION: Unanimously Affirmative.

(Log # 100)

73-120 - (3-3): Reject
SUBMITTER: Michael J. Foley, Englewood, CO
RECOMMENDATION: Delete 3-3.
SUBSTANTIATION: Section 1-1, Purpose states that appliances or other utilization equipment is not to be inspected as part of the electrical reinspection. Section 3-3 indicates inspection would be necessary to determine if the appliance or utilization equipment is properly installed and connected.
COMMITTEE ACTION: Reject.
COMMITTEE STATEMENT: See Committee Action and Committee Statement on Proposal 73-118.
VOTE ON COMMITTEE ACTION: Unanimously Affirmative.

(Log # 109)

73-121 - (3-3): Reject
SUBMITTER: James M. Daly, Upper Saddle River, NJ
RECOMMENDATION: Revise to read as follows:
"Where permanently installed appliances or utilization equipment. . .".
SUBSTANTIATION: The scope of the Committee refers to "the reinspection of electrical systems in existing dwellings." Only the permanently installed portion of the electrical system, including the heating system, central air conditioner, water heater, water well pump, attic exhaust fan, etc. should be covered by this document. Portable equipment connected by a cord and plug should not be included under this document. This document should only address the electrical system of an empty house since that is what the buyer will receive.
COMMITTEE ACTION: Reject.
COMMITTEE STATEMENT: The Committee feels that appliances and utilization equipment other than permanently installed must be properly installed and connected.
VOTE ON COMMITTEE ACTION: Unanimously Affirmative.

(Log # 33)

73-122 - (3-4 (New)): Reject
SUBMITTER: Derek Young, Parlin,, NJ
RECOMMENDATION: New text:
Automatic Garage Door Openers. Location of push button shall be installed 6 ft 0 inch min. above finished floor in clear view of garage door at an accessible location. Garage door shall reverse itself to an open position when an obstruction is detected. Reversal shall occur without developing a crusting force.
SUBSTANTIATION: Unnecessary deaths and permanent injury to children we're talking above a 200 # plus door being pulled closed by 1/4 to 3/4 H.P. motor. Which does kill unexpectedly. This is a very common household device used today with very little maintenance and respect by their owners since this is an electrical motor and if the reverse procedure does not function properly it's therefore defective causing the same or greater hazard as the other paragraphs covered in NFPA 73. Also just having the door open and close does not signify proper operation therefore this device shall be spelled out as to avoid confusion and misinterpretation by personnel.
COMMITTEE ACTION: Reject.
COMMITTEE STATEMENT: Product requirements are not part of the scope of this code. See also Committee Action on Proposal 73-95.
VOTE ON COMMITTEE ACTION: Unanimously Affirmative.

(Log # CP10)

73-123 - (Entire Document): Accept
SUBMITTER: Technical Committee on Electrical Systems Maintenance
RECOMMENDATION: The Technical Committee on Electrical Systems Maintenance proposes for adoption, a new document, NFPA 73, Residential Electrical Maintenance Code for One- and Two-Family Dwellings
SUBSTANTIATION: The Standards Council established a Committee on Electrical Systems Maintenance to address fire and shock hazards present in existing one- and two-family dwellings. This document reflects the Committee work to complete that assignment.
COMMITTEE ACTION: Accept.

NFPA 73

Residential Electrical Maintenance Code for One- and Two-Family Dwellings

1993 Edition

Chapter 1 Introduction

1-1 Purpose. The purpose of this Code is to provide requirements for evaluating installed electrical systems within and associated with existing residential dwellings to identify safety, fire, and shock hazards such as improper installations, over-heating, physical deterioration, abuse, and similar conditions.

It is the intent of this Code to provide criteria that will enable the identification of hazardous conditions that are evident during a visual inspection of an existing residential dwelling. It is not the intent of this Code to provide for the inspection of (1) that portion of the electrical system concealed by the building structure or finish, or (2) appliances or other utilization equipment. It is not the intent of this Code to define installation requirements that may be desired for convenience or utilitarian purposes.

1-2 Scope.

1-2.1 This Code applies to accessible electrical equipment and those portions of the electrical system of existing one- and two-family residential dwellings that are accessible during an inspection without removing any permanent part of the building structure or finish.

NOTE NO. 1: It is not intended for this Code to prohibit the removal of faceplates or other covers or fixtures to identify hazards.

NOTE NO. 2: It is not intended that inspection procedures be performed that may damage the building structure, wiring, or equipment.

NOTE NO. 3: It is not intended that inspections in accordance with this Code will identify future conditions such as failure of components or other portions of equipment or wiring.

1-2.2 This Code does not apply to utilization equipment, mobile homes, recreational vehicles, floating dwellings, buildings containing more than two dwelling units, buildings used for other than dwelling purposes, hotels, motels, or new construction.

1-3 Enforcement.

1-3.1 This Code is intended to be suitable for mandatory application by governmental bodies and other inspection agencies exercising legal jurisdiction over electrical installations. 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. Where remedial action is required by the authority having jurisdiction, it shall be performed in accordance with NFPA 70, *National Electrical Code*®, except as modified by this Code.

NOTE: It is the intent of this Code to only require remedial action necessary to correct the identified hazards.

1-3.2 The authority having jurisdiction may waive specific requirements in this Code where it is assured that equivalent objectives can be achieved.

1-4 Definitions.

1-4.1 General. This section contains only definitions essential to the proper
application of this Code. It is not intended to include commonly defined general terms or commonly defined technical terms from related codes and standards.

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. (*See "Concealed" and "Exposed."*)

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, etc.

Approved. Acceptable to the authority having jurisdiction.

Bonding. The permanent joining of metallic parts to form an electrically conductive path that will assure electrical continuity and the capacity to conduct safely any current likely to be imposed.

Branch Circuit. The circuit conductors between the final overcurrent device protecting the circuit and the outlet(s).

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. [*See "Accessible (as applied to wiring methods)."*]

Equipment. A general term including material, fittings, devices, appliances, fixtures, apparatus, and the like used as a part of, or in connection with, an electrical installation.

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 not suitably guarded, isolated, or insulated. (*See "Accessible" and "Concealed."*)

Grounded. Connected to earth or to some other conducting body.

Grounded Conductor. A system or circuit conductor that is intentionally grounded.

Grounding Conductor. A conductor used to connect equipment or the grounded circuit of a wiring system to a grounding electrode or electrodes.

Grounding Conductor - Equipment. The conductor used to connect the noncurrent-carrying metal parts of equipment, raceways, and other enclosures to the system grounded conductor, the grounding electrode conductor, or both at the service equipment or at the source of a separately derived system.

Grounding Electrode Conductor. The conductor used to connect the grounding electrode to the equipment grounding conductor, to the grounded conductor of the circuit or to both at the service equipment or at the source of a separately derived system.

Ground-Fault Circuit-Interrupter. A device intended for the protection of personnel that functions to deenergize a circuit or portion thereof within an established period of time when a current to ground exceeds some predetermined value that is less than that required to operate the overcurrent protective device of the supply circuit.

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

Listed. Equipment or materials included in a list published by an organization that is acceptable to the authority having jurisdiction and concerned with product evaluation, that maintains periodic inspection of production of listed equipment or materials, and whose listing states either that the equipment or material meets appropriate standards or has been tested and found suitable for use in a specified manner.

NOTE: The means for identifying listed equipment may vary for each organization concerned with product evaluation, some of which do not recognize equipment as listed unless it is also labeled. The authority having jurisdiction should utilize the system employed by the listing organization to identify a listed product.

One-Family Dwelling. A building consisting solely of one dwelling unit.

Outlet. A point on the wiring system at which current is taken to supply utilization equipment.

Panelboard. A single panel or group of panel units designed for assembly in the form of a single panel; including buses, 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 or partition and accessible only from the front.

Receptacle. A receptacle is a contact device installed at the outlet for the connection of a single attachment plug.

Receptacle Outlet. An outlet where one or more receptacles are installed.

Service. The conductors and equipment for delivering energy from the electricity supply system to the wiring system of the premises served.

Two-Family Dwelling. A building consisting solely of two dwelling units.

Utilization Equipment. Equipment that utilizes electric energy for mechanical, chemical, heating, lighting, or similar purposes.

Chapter 2 General Requirements

2-1 Scope. This chapter provides requirements for reinspection of existing one- and two-family dwellings.

2-2 Services.

2-2.1 The service shall be adequate to serve the connected load.

2-2.2 Weatherheads shall be securely fastened in place.

2-2.3 Service entrance conductors shall not show evidence of excessive deterioration of conductor insulation or cable sheath and shall have adequate clearances.

2-2.4 Service entrance raceways or cables shall be securely fastened in place.

2-2.5 Service entrance raceways and cables shall be properly terminated.

2-2.6 Service entrance equipment shall be accessible and shall provide adequate clearance.

2-2.7 Service entrance equipment, cables, raceways, or conductors shall not show evidence of physical damage, corrosion, or other deterioration.

2-2.8 Service equipment shall be grounded. The grounding electrode conductor shall be properly sized, terminated, and connected to an approved grounding electrode.

2-3 Panelboards and Distribution Equipment.

2-3.1 Panelboards and distribution equipment shall be provided with adequate clearances that provide reasonable access.

2-3.2 Panelboards and distribution equipment shall not show evidence of physical damage, corrosion, or other deterioration.

2-3.3 All cables entering the equipment shall be secured with approved connectors. All unused openings shall be properly closed.

2-3.4 All metal parts shall be properly grounded using approved fittings.

2-3.5 Dead front panels, partitions, or parts of the enclosure shall be installed to assure protection from live parts.

2-4 Overcurrent Protective Devices.

2-4.1 Overcurrent protective devices shall be properly rated for conductor ampacities.

2-4.2 Overcurrent devices shall not show evidence of physical damage or overheating.

2-4.3 Where evidence of overfusing of or tampering with Edison-based type fuses exists, Type S nontamperable adapters shall be installed.

2-5 Conductors.

2-5.1 Conductors shall be properly terminated and supported at panelboards, boxes, and devices.

2-5.2 Conductors shall be properly sized for the circuit rating.

2-5.3 Splices shall be made in an approved manner.

2-6 Cables.

2-6.1 Cables and cable assemblies shall be properly secured and supported.

2-6.2 Cables shall not show evidence of overheating or deterioration.

2-6.3 Cables shall not show evidence of damage or physical abuse.

2-7 Flexible Cords and Cables.

2-7.1 Flexible cords and cables shall not be used (1) as a substitute for the fixed wiring of a structure; (2) where run through holes in walls, ceilings or floors; (3) where run through doorways, windows, or similar openings; (4) where attached to building surfaces.

2-8 Raceways.

2-8.1 Raceways shall be securely fastened in place.

2-8.2 Raceways shall be terminated in fittings or connectors designed for the specific wiring method with which they are used.

2-8.3 Raceways shall not show evidence of excessive deterioration or physical damage.

2-9 Permanently Connected Lighting Fixtures.

2-9.1 Fixture taps and branch circuit supply conductors shall not show evidence of damage or deterioration from overheating.

2-9.2 Fixture canopies shall be in place and properly secured.

2-9.3 Where identified, fixtures shall be lamped in accordance with available instructions and shall not exceed marked maximum ratings.

2-9.4 Where fixture tap conductors or terminals and branch-circuit conductors are identified for polarization, fixture connections shall be properly polarized.

NOTE: Additional protection may be provided by grounding metal noncurrent-carrying parts of lighting fixtures where a means of grounding is available.

2-9.5 Open incandescent lamps installed in clothes closets shall have proper clearance from combustible materials.

2-10 Boxes and Similar Enclosures.

2-10.1 Covers shall be in place and properly secured.

2-10.2 Boxes, covers, and similar enclosures installed in wet locations shall be identified for the purpose.

2-10.3 Boxes and similar enclosures installed in damp locations shall be so placed or equipped as to prevent moisture from entering or accumulating.

2-10.4 Unused openings in boxes shall be effectively closed to afford protection substantially equivalent to that of the wall of the box.

2-10.5 Where an equipment grounding conductor is provided, all conductive surfaces likely to become energized shall be effectively grounded.

2-11 General Use Switches and Receptacles.

2-11.1 Enclosures shall be securely fastened in place.

2-11.2 Faceplates shall not be damaged or missing.

2-11.3 Connection of conductors to termination points shall ensure good connections without showing evidence of arcing or overheating.

2-11.4 Switches and receptacles shall be properly secured and shall not show evidence of overheating or physical damage.

2-11.5 The function of switches and receptacles shall not be impaired by physical damage.

2-11.6 Receptacles shall be wired with proper polarity. All grounding type receptacles shall be grounded where receptacle terminals and branch-circuit conductors are identified for polarization.

2-11.7 Receptacle contacts shall have acceptable blade retention when tested with a listed retention tester.

2-11.8 Switches shall be rated for the connected load.

2-12 Where flexible cords or cables are used as a substitute for fixed wiring to supply outlets in rooms or areas, such rooms or areas shall be considered to have inadequate outlets. Such flexible cords shall be removed.

NOTE: See 2-7.1.

Chapter 3 Appliances and Special Equipment

3-1 Ground-Fault Circuit-Interrupter. Where ground-fault circuit-interrupters are installed, they shall operate properly.

3-2 Smoke Detectors. Smoke detectors shall be installed as required by existing ordinances. Where smoke detectors are installed, they shall operate properly.

3-3 Appliances and Utilization Equipment. Where appliances or utilization equipment are present, they shall be properly installed and connected.

3-3.1 Appliances and utilization equipment shall have proper disconnecting means and overcurrent protection.