

26/3/95
Approved by
Firms Name
Committee for March

LOG OF MEETING

HOME ELECTRICAL WIRING SAFETY

SUBJECT: Encouraging Electrical Inspection of Existing Homes

DATE OF MEETING: 20 April 1995, 9:00 A.M.

PLACE: Consumer Product Safety Commission, Room 410B
Bethesda, MD

SOURCE OF ENTRY: Aaron Banerjee

COMMISSION ATTENDEES:

Aaron Banerjee	CPSC	(301)	504-0508x1393
Ross Koeser	CPSC - FO	(301)	504-0788
Larry Moskowitz	CPSC	(301)	413-7101
Bob Northedge	CPSC	(301)	504-0508x1302
Andy Stadnik, PE	CPSC	(301)	504-0504
George Sweet	CPSC - EPHF	(301)	504-0468

NON-COMMISSION ATTENDEES:

Dave Dini	UL - Northbrook, IL	(708)	272-8800x42982
Steve Scully	NAHB Research	(301)	249-4000
Gil Thompson	IAEI - MD	(410)	592-7676
Jack Wells	Pass Seymour/Legrand	(315)	468-8238

ATTACHMENTS:

1. Meeting Agenda
2. Log of Meeting on Home Electrical System Fires Project, NFPA-73, 4 Oct 1994.
3. Log of Meeting on Task Group on Encouraging Electrical Inspections for Existing Homes. 11 Oct 1994.
4. Log of Meeting with MD State Fire Marshals, 14 Feb 1995.
5. Log of NFPA-73 Code Committee Meeting 22-23 Feb 1995.
6. Charkey, E. "NFPA-73 -- A New Standard". SERAD Winter '94/'95, p 2-3
7. Memorandum, Senator Kemp Hannon, Chairman, Council of State Governments (CSG) to Corporate Representatives.

✓

transparencies for the use of CPSC representatives.

One concern about NFPA-73 is that if it were widely adopted, third-party inspectors (i.e. home inspectors) may have to be relied upon. It was pointed out that the quality and thoroughness of inspections from third-party inspectors varies greatly.

The next discussion concerned organizations which could play a role in promoting NFPA-73. Some talks have been held with the insurance companies, who have worked with termite inspectors in the past. It was suggested that additional meetings should be held with homebuilders, contractors, etc.

How should NFPA-73 be promoted to the consumer? It was pointed out that the owners of houses with the worst problems are often the least likely to want their homes inspected. The degree of hazard depends upon not only quality of the permanent wiring, but also upon how the room is being used. A photograph was shown of a home which lacked an adequate number of electrical outlets. The owners had large numbers of extension cords running across the floors. Without the extension cords, the house would have appeared much safer. The hazard was introduced by the extension cords which can cause fires because of physical damage to their insulation or electrical damage from currents greater than the cord is rated to carry.

Meeting Agenda
Encouraging Electrical Inspection of Existing Homes

April 20, 1995, 9:00 a.m.
East-West Towers, Room 410B

- I. Introduction/History
- II. CPSC Field Offices Involvement
Handout
- III. Meetings with State Officials
 - A. NY State Officials, October
Handout
 - B. Maryland State Fire Officials, February
Handout
- IV. Letter to American Society of Home Inspectors (ASHI)
- V. Model Legislation Submitted to Council of State Governments
Handout
- VI. Article by Ed Charkey in SERAD (Safety Engineering and Risk
Analysis Division) Newsletter Winter 1994/95
Handout
- VII. NFPA 73 Committee Meeting, San Diego, March
Handout
- VIII. Group Discussion on Future Direction

R. Northedge

LOG OF MEETING
DIRECTORATE FOR ENGINEERING SCIENCES

SUBJECT: Home Electrical System Fires Project and the new Residential Electrical Maintenance Code for One- and Two-Family Dwellings, NFPA 73.

PLACE: Office of Fire Prevention and Control conference room, 12th floor, 41 State Street, Albany, NY.

DATE OF MEETING: October 4, 1994

DATE OF ENTRY: October 14, 1994

SOURCE OF ENTRY: *Robert L. Northedge*
Robert L. Northedge

COMMISSION ATTENDEE: Robert L. Northedge, Engineering Sciences

NON-COMMISSION ATTENDEES:

Francis A. McGarry, Chairman, Fire Prevention Code Council Subcommittee
Albert J. Reed, Vice President, NY Board of Fire Underwriters
Dan White, Br Manager Buffalo Div, NY Board of Fire Underwriters
Richard W. Duncanson, Sr. Fire Inspector, City of Middletown
Roy Scott, DOS - Codes Division
John MacDonald, International Masonry Institute
Sandra DuGosser, NYSBA
Herbert R. Martin, Code Council member
John Flanigan, Town of Bethlehem - Fire Code Commission
Gunnar L. Neilson, Town of Ossining - Building Fire
Robert Brunner, Code Council member
William W. Ryan, Br Manager Albany Div, NY Board of Fire Underwriters

SUMMARY

Mr. Northedge's purposes for attending the meeting were to inform the Fire Prevention subcommittee of CPSC's fire-safety initiatives for older homes in need of electrical maintenance and to explain how the NFPA 73 maintenance code can help to improve electrical-fire safety.

The subcommittee chairman, Mr. McGarry, opened the meeting by discussing the NFPA 73 Residential Electrical Maintenance Code for One- and Two-Family Dwellings. The chairman explained that he had received a letter from Art Smith of the New York Board of Fire Underwriters. Mr. Smith requested that the subcommittee initiate the process required to incorporate the NFPA 73 code into the New York State Uniform Fire Prevention Code.

Mr. Reed explained the benefits that could be gained from using the NFPA code for inspecting older homes. He further explained the electrical inspection process now used by the New York Board of Fire Underwriters. When asked how the Board of Fire Underwriters would handle a large increase in inspection requests, Mr. Reed explained that additional inspectors would be hired. He also added that the cost of an inspection would drop significantly.

Mr. Northedge provided statistics on electrical wiring fires to the subcommittee. In addition, he presented an overview of the Consumer Product Safety Commission's (CPSC) activities to address these fires in older homes. He also explained the origin of the NFPA 73 code and the application of the code to identify various wiring problems that cause electrical wiring fires in older homes. Mr. Northedge gave the attendees a document containing a summary of CPSC's project activities to reduce electrical wiring fires.

The subcommittee chairman called for a vote on a proposal to incorporate the NFPA 73 code into the New York State Uniform Fire Prevention Code. The vote was unanimous in favor of the proposal. The subcommittee agreed that the issue of enforcement would be worked out by the "authorities having jurisdiction." The proposal will be forwarded to the New York State Code Council. If the Code Council agrees with the subcommittee proposal the Council will request public comments and hold hearings.

With regard to a future subcommittee issue, the chairman introduced the subject of window bars for preventing children from falling from windows. He requested that the subcommittee consider the fire-safety issues involved. The issue will be discussed at a future subcommittee meeting.

26msk *Northedge*
7515 I

LOG OF MEETING

DIRECTORATE FOR ENGINEERING SCIENCES

SUBJECT: Task Group on Encouraging Electrical Inspections for Existing Homes

DATE OF MEETING: 10/11/94

PLACE: East-West Towers, Bethesda.

LOG ENTRY SOURCE: Dennis McCoskrie *(signature)*

DATE OF ENTRY: 10/14/94

COMMISSION ATTENDEES:

William H. King, Jr.
Edward Krawiec
Dennis McCoskrie

Larry Moskowitz
Robert L. Northedge
George Sweet

NON-COMMISSION ATTENDEES:

See attached roster.

SUMMARY OF MEETING:

Mr. King reviewed the history of the task groups and identified the three meetings to be held October 11 and 12:
Encouraging Electrical Inspection for Existing Homes,
Innovative Technology,
Wiring Methods for Rehabilitation Work.

He also announced that Bob Northedge had assumed management of the Home Electrical System Fires project while he (Bill King) was resuming the Directorship of the Electrical Engineering Division.

He described the strong interest of CPSC's chairman in the Home Electrical System Fires project and mentioned that this interest led to moving up the schedule for demonstrating electrical rehabilitation of typical houses, by at least one year.

Mr. King then pointed out that the deadline for additions and revisions to NFPA-73 was January 5, 1995. He added that he planned to recommend adding inspection of polarity and grounding of all outlets in a home to this code. He added that he had obtained valuable information by performing these tests during the recent inspection of five homes.

CPSA 6 (b)(1) Cleared

No Mfrs/Prvtlbrs or
Products Identified
Executed by 1-27-95
Date
Signature

Mr. Charkey introduced the question of qualifications for inspectors enforcing NFPA-73. He stated that New York State requires home inspectors to be Professional Engineers (PE's) registered in New York State whereas Maryland recognizes, in addition to PE's registered in Maryland, electrical inspectors who have been examined and qualified by the International Electrical Inspectors Association and licensed Master Electricians. Mr. Thompson added that the question of what would constitute adequate training to enforce NFPA-73 has not been addressed.

Mr. Wells suggested efforts to familiarize active home inspectors with NFPA-73 with the objective of stimulating proposals to revise and improve this code. It was agreed that support (requirement for meeting NFPA 73 before approving mortgages) from lenders could accelerate adoption of this code. There are precedents in requirements for approval of gas appliances and installations and for termite inspections. Mr. Northedge mentioned that Fannie Mae representatives were not hopeful that their agency could make NFPA-73 inspection a prerequisite to approving a mortgage because they are currently charged to reduce existing delays in approving mortgages.

Mr. Wells suggested that favorable publicity for NFPA-73 could be planted in the publications of the International Association of Electrical Inspectors (IAEI), the Southern Building Code Congress International (SBCCI) and the Building Officials and Code Administrators (BOCA). It was proposed, in particular, that Phil Simmons, Executive Director of IAEI, be approached for some help of this kind.

A request was made to Mr. Favardin of the National Conference of States on Building Codes and Standards, Inc. (NCSBCS) to prepare an article about NFPA-73 to be included in NCSBCS' newsletter. It was stated that as many as ten states were already active in considering this code. In particular, activities in Virginia and North Carolina were mentioned, as well as a proposal for adoption presented to the Board of Rules and Appeals of Broward County, (Ft. Lauderdale) FL (documents attached). The North Carolina activity includes consideration of inspector qualification and testing.

Mr. Charkey stated that he had written to his organization (American Insurance Service Group) in favor of the new code, but went on to say that any support from the casualty insurance industry would have to be solicited from individual insurance companies. Mr. Favardin mentioned the possibility that applications for homeowner's insurance might offer a reduced rate for homes that comply with NFPA-73. Mr. King reported that previous inquiries to insurance companies along these lines had disclosed a general resistance to differential rates, except for multifamily dwellings. Mr. Favardian pointed out that rate differentials are already employed, based upon jurisdictional or geographic areas. Mr. Wells pointed out that the part of the premium covering fire losses is a relatively small proportion of the total.

Mr. Charkey announced his intention to recommend more specific coverage in NFPA 73 to cite frayed insulation as a hazardous condition. He stated that the two most common problems in his experience were frayed insulation and inadequate or no grounding.

Mr. Charkey went on to say that just the existence of a voluntary standard or code, even though the code may not be legally applicable in the jurisdiction involved, can exert an important influence in liability litigation.

Mr. Krawiec commented that NFPA- 73 does not contain rules or information to define adequate repairs. It was explained that the requirements for rehabilitation were left to be determined by the authority having jurisdiction. Early drafts of this code did have corrective data, but the NFPA Code Correlating Committee could not agree to a situation where another "adequate" NFPA code would disagree with the National Electrical Code. It was mentioned that a number of rehabilitation codes are presently in use (BOCA, HUD, City of Port Huron, etc.) as well as inspection procedures published by the American Society of Home Inspectors (ASHI), "HOMEPRO" and "HOUSEMASTER". All of these correlate partially with NFPA-73. It was proposed that Mr. Petty, Mr. Charkey, and Mr. Wells prepare a draft document to explore ASHI interest in adopting NFPA-73.

It was also proposed that promotion of NFPA-73 be emphasized in CPSC's "Electrical Safety Month" and "Fire Prevention Week". Mr. Northedge described CPSC plans for the agency's Public Affairs Specialists in the field offices to explore means of obtaining adoption of NFPA-73 by local authorities having jurisdiction.

It was proposed to hold the next meeting in the spring of 1995 and the group agreed to do this.

Henry J. King
October 11, 1994
CPSC ENGINEERING

BILL KING

- 1 Larry Moskowitz - CPSC
2. DAVE DINI - UL
3. DENNIS McLOSKEY - CPSC
4. J. J. Thompson IAET - MP Elec.
5 George Sweet CPSC
6. Bob Clarey EATON (Cutler-Hammer)
7. Nick Wakeman Product Safety Letter
8. Bob Northcutt - CPSC, Engineering Sciences
9. Bob Petty - HouseMaster.
- 10 Bob Dunigan NAED
- 11 ED KRAWIEC CPSC ENGINEERING
- 12 Edward S. Charney American Insurance Service Group
13. Siavash C. Farvardin National Conference of States on Building Codes & Standards.
- 14 JACK WELLS - PRESS: SEYMOUR / LIBRANO

September 13, 1994

New York Department of State Fire Prevention
Subcommittee Meeting on NFPA 73

The Fire Prevention Subcommittee of the Department of State of New York state will hold a meeting October 4, 1994 to discuss several topics, including whether to recommend to the State Code Council the adoption of NFPA 73 as part of the New York State Uniform Fire Prevention Code:

Fire Prevention Subcommittee - Composed of 15 members from the fire prevention committee, such as inspectors and fire protection officials. They make recommendations regarding fire prevention to the New York State Code Council.

The New York State Code Council - composed of 17 members (only two from the fire protection area). The NY State Uniform Fire Prevention Code applies every where within the state of new York accept New York City. However, NY City must adopt requirements at least as strong as those for the state.

The Code-Change Process - The Fire Prevention Subcommittee makes a recommendation to the State Code Council to adopt a change to the State Uniform Fire Prevention Code. The State Code Council then takes up the issue. If the Code Council decides to go forward they request public comments and hold hearings. If the Code Council decides to change the Fire Prevention Code the decision goes to the Secretary of State for review. The Secretary reviews the decision to assure that the code is not being relaxed. The whole code-change process can take 18 months to 2 years.

September 30, 1994

Mr. Mark Early
NFPA
Batterymarch Park
Quincy, MA 02269-9101

SUBJECT: NFPA 73
State of Virginia

Dear Mark:

With this I am forwarding a letter from John Minick with a copy of a bill that is before the Virginia House.

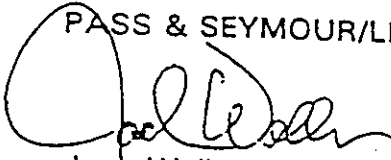
It strikes me that there's a place for NFPA-73 either in the legislation or in the regulation it calls for.

NFPA-73 is the only protocol defining precisely what an electrical reinspection should cover. NFPA-73 would work in harmony with Virginia's minimum housing code (SBCCI I believe) and the NEC.

Possible wording "One and two family dwellings shall be inspected in accordance with the most recent edition of NFPA-73, Electrical Safety Inspection Code for Existing Dwellings. Remedial work shall be performed in accordance with the National Electrical Code and minimum housing code."

Please include this on the Electrical Code Advisory Committee's agenda.

Best regards,

PASS & SEYMOUR/LEGRAND

Jack Wells
Vice President
Corporate Development

jpw/mw
early.let

cc: Ken Backman
Dick Murray
John Minick

Ben Roy
Bill King

P.S.: Also attached is a memo from John Minick regarding some opportunity in North Carolina.



National Electrical Manufacturers Association
2101 L Street, N.W. Suite 300
Washington, D.C. 20037 (202) 457-8400

NEMA Southern Field Office
John Minick
2830 Santa Rita
Grand Prairie, Texas 75052-5219
Home: (214) 264-7196
Bus: (214) 642-8462
Fax: Same as Business

September 12, 1994

Mr. Jack P. Wells,
Vice President, Corporate Development
Pass & Seymour/LeGrand
P.O. Box 4822
Syracuse, New York 13221

Re: State Of Virginia House Bill No. 891 - Reinspection

Dear Jack,

Please find enclosed a copy of proposed Virginia House Bill No. 891 which would require that all buildings would require reinspection before utility reconnection. Also, please excuse my tardiness in obtaining a copy of this bill for you as no one I currently knew in Virginia had a copy of the actual bill.

This bill was held over for further study and will be considered again by the Virginia House. According to Greg Revels, Deputy Building Official with Henrico County, Virginia, the State of Virginia already has a reinspection guideline law in effect and this bill, if passed, would only be an aid to allow the existing reinspection law to be enforced.

Mr. Revels also informed me that it would appear that the State of Virginia will be considering a "private inspector" bill that would regulate nongovernmental inspectors such as inspectors that inspect homes for FHA, VA, and for other reasons. This proposed bill would also allow for reinspection enforcement through the Virginia Statewide Building Code which already contains guidelines for reinspection.

If I may be of further assistance, please call me at (214) 642-8462.

Sincerely,

John Minick

cc: Larry Miller

LEH752717

HOUSE BILL NO. 891
Offered January 25, 1994

A BILL to amend the Code of Virginia by adding a section numbered 36-99.2:1, relating to Uniform Statewide Building Code; reinspection of certain buildings.

Patrons—Spruill, Christian, Crittenden, Jones, D.C., Jones, J.C., Melvin, Moore and Robinson;
Senators: Lucas, Maxwell and Miller, Y.E.

Referred to Committee on General Laws

Be it enacted by the General Assembly of Virginia:

1. That the Code of Virginia is amended by adding a section numbered 36-99.2:1 as follows:
§ 36-99.2:1. Reinspection of buildings prior to utility reconnection.

The Board of Housing and Community Development shall promulgate regulations in accordance with the Administrative Process Act (§ 9-6.14:1 et seq.), requiring reinspection of any building before service can be restored to an electric or gas utility installation from which electrical or gas services had been discontinued or transferred for any reason other than nonpayment of service bills, including but not limited to changes in use or occupancy. Such inspections shall be conducted by the local building official to ensure compliance with the Uniform Statewide Building Code. Upon reinspection and approval of any building as required by this section, the local building official shall notify the utility service provider to reconnect service or, in the case of a change in occupancy or use, to transfer service.

Official Use By Clerks

Passed By
The House of Delegates
without amendment
with amendment
substitute
substitute w/amdt

Passed By The Senate
without amendment
with amendment
substitute
substitute w/amdt

Date: _____

Date: _____

Clerk of the House of Delegates

Clerk of the Senate

M E M O R A D U M

8/30

To: Larry Miller
From: John Minick *JM*
Date: August 23, 1994
Subject: North Carolina Qualification Board Creation

A report was given at the recent Council of Code Officials (COCO) meeting that I attended in North Carolina which I feel should be brought to your immediate attention.

Grover Sawyer, P.E. with the North Carolina Department of Insurance announced the creation of a new inspector qualifying board within the State of North Carolina. Mr. Sawyer is currently the staff director and liaison to the current North Carolina Code Officials Qualification Board (publicly employed inspectors). This new board will oversee the qualification of private inspectors that inspect older homes for rehabilitation, real estate loans such as FHA or VA, or other such causes for older home inspection. To date in North Carolina, these inspections have been accomplished by private, as opposed to public, unregulated persons without any specific guidelines for such inspections. Apparently it was felt that a separate board from the public inspector's qualification board was needed for these private inspectors.

This new North Carolina inspector qualification board is going to be appointed by the Governor of North Carolina soon and this board will then set guidelines for inspector qualifications, testing of inspectors, and adopt guidelines and regulations for making these types of inspections.

This would appear to be an opportunity to approach this newly formed regulatory agency concerning NFPA 73. I do not know Mr. Sawyer personally and only met him for the first time at the COCO meeting.

Mr. Sawyer may be contacted by writing him at:

Grover Sawyer, P.E.
Director of Inspector Qualification Boards
Department of Insurance
State of North Carolina
P.O. Box 26387
Raleigh, North Carolina 27611

or by phone at (919) 733-3901.

cc: Frank Kitzantides
Jack Wells

ATTN Joon Arca

ATTN: Bob Dunig
Schwing Elec
516-727-018

NOTE TO COMMITTEE CHAIRMAN: PLEASE BE SURE A REASON IS STATED FOR ANY AND ALL PROPOSED CODE CHANGES THAT RESULT FROM MOTIONS MADE BY COMMITTEE MEMBERS.

DATE: September 21, 1994

TO: ELECTRICAL COMMITTEE

- | | |
|-------------------|----------------|
| T. Bray, Chairman | A. Kozlich |
| D. Rice | J. Payne |
| J. Somers | C.M. Schneider |
| T. Baker, Adv. | W. Self |
| F. Bryan | J. Toscano |
| D. Hardesty | L. Wansor |
| R. Korte | L. Welch |

FROM: Tarry L. Baker, Electrical Code Compliance Officer *S.L.B.*

THROUGH: Glenn L. Russell, Interim Administrative Director *GR*

SUBJECT: ELECTRICAL COMMITTEE MEETING - OCTOBER 6, 1994

The Chairman of the Committee, Mr. Bray, has called for a meeting of the Electrical Committee on October 6, 1994 at 1:30 p.m., in the conference room on the fourth floor at 955 South Federal Highway, Fort Lauderdale.

A G E N D A

1. Proposed New Code Subsection 4513.12, Mr. Tarry L. Baker CECCO, Board of Rules and Appeals will address.
2. Letters from Mr. Len Mitchell, Special Services Investigator, Audits & Investigations, Canadian Standards Associates (CSA). To formally recognized CSA in Chapter 45 and Section 402 of the South Florida Building Code Broward Edition as an Accredited Authoritative Agency.
3. Adoption of National Fire Protection Association (NFPA) 73, Residential Electrical Maintenance Code for One-and-Two-Family Dwellings in Chapter 45 and Section 402 of the South Florida Building Code Broward Edition, Mr. Bruce Pockey, Chief Executive Officer, McDonald Distributors of Florida, Incorporated will address on behalf of the National Association of Electrical Distributors.

GENERAL DISCUSSION

In accordance with established Board policy, please notify this office the day before the meeting should you not be able to attend, so we may be sure of a quorum.

Please note that all our meetings are published and open to the public. However, only committee members have the right to vote and all other persons may be involved in limited discussion only. Only agenda items may be voted upon.

CPSC 6 (b)(7) Cleared
K 6/23/95
75132

LOG OF MEETING

DIRECTORATE FOR ENGINEERING SCIENCES

SUBJECT: Maryland State Fire Marshal Meeting

DATE OF MEETING: February 14, 1995

PLACE: Commerce Electrical Supply Building, Linthicum, MD

LOG ENTRY SOURCE: Robert L. Northedge

DATE OF ENTRY: February 16, 1995

COMMISSION ATTENDEES: Robert Northedge

NON COMMISSION ATTENDEES:

- Charles Cronauer, Deputy Chief Maryland State Fire Marshal
- Charles Cook, Housing and Community Development, State of Maryland Codes Department
- Robert Johnson, Secretary, Maryland Electrical Inspectors Association
- Gilbert Thompson, Chairman, Electric League of Maryland
- Legislative Committee and member of the Maryland Electrical Inspectors Association

SUMMARY OF MEETING:

The participants began the meeting with a discussion of the content of NFPA 73, Residential Electrical Maintenance Code for One- and Two-Family Dwellings, which was issued January 1994 by the National Fire Protection Association (NFPA) and approved by the American National Standards Institute. The code is offered for use in law and for regulating purposes in the interest of life and property protection.

Mr. Northedge explained the Consumer Product Safety Commission (CPSC) project on Home Electrical Systems Fires. The project's main goal is to reduce electrical fires in homes by providing sufficient technical information to state jurisdictions so that local authorities can seek adoption of the NFPA 73 inspection code.

Mr. Northedge presented the background of the origin of NFPA 73. As result of fire investigation studies sponsored by CPSC and published in a 1987 CPSC report, Residential Electrical Distribution Fires, NFPA initiated development of the inspection code, NFPA 73. The report demonstrated the need to inspect and correct residential wiring hazards in existing homes in order to reduce deaths and injuries from electrical fires.

The 1987 report contained estimates of residential wiring fires and resulting deaths and injuries. About 50,400 residential wiring fires occurred annually from 1983 to 1987 and they

resulted in approximately 440 deaths, 1400 injuries, and 500 million in property loss annually.

Between 1988 and 1992 the annual average number of home wiring fires is 42,800 and the annual average deaths is 350. In comparison to the 1983 to 1987 annual average, there is little significant change.

The report indicated that the age of the dwelling appeared to contribute to the likelihood that it would experience a fire. The rate of electrical wiring fires in dwellings over 40 years old was determined to be about 3 times that of dwellings 11 to 20 years old.

Mr. Northedge showed the participants photographic slides of hazardous wiring conditions found in an older home in Prince Georges County, Maryland. Many of the wiring hazards depicted in the slides have been identified in the 1987 report as causes for fires.

Mr. Thompson outlined a proposal to the other participants for getting the NFPA 73 inspection code into the existing Maryland Liveability Code. His proposal will stipulate that all electrical equipment must be installed in accordance with NFPA 70, the National Electrical Code and maintained in accordance with NFPA 73, Residential Electrical Maintenance Code for One- and Two-Family Dwellings. Mr. Thompson plans to prepare his proposal and submit it to the Housing and Community Development department. The participants agreed that if all went well the proposal would be introduced to the state legislature in next year's session. The Maryland Liveability Code applies to one- and two-family rental properties and is enforced upon receiving a complaint.

Mr. Cronauer indicated that rental property of three or more units is covered by the Maryland State Fire Prevention Code. The fire prevention code stipulates that the electrical wiring in multi-family rental property must meet the requirements of the National Electrical Code, NFPA 70. Enforcement of the fire prevention code becomes quite complex. However, it appears that two of the most important ways of enforcement is through state licensure and local building permits. For example, to convert an existing residential dwelling to rental units or a day care center a license would be required for operation. The Maryland State Fire Marshal's office must sign off on that license; hence, Mr. Cronauer's office would inspect the building for fire hazards.

6123k2 Y

LOG OF MEETING

DIRECTORATE FOR ENGINEERING SCIENCES

SUBJECT: National Fire Protection Association (NFPA) Code Committee Meeting to Consider New Proposals; NFPA-73, Residential Electrical Maintenance Code for One- and Two-Family Dwellings.

DATE OF MEETING: 3/22-23, 1995 PLACE: Pan-Pacific Hotel
San Diego, CA

DATE OF ENTRY: 3/28/95

SOURCE OF ENTRY: Dennis McCoskrie ESEE

COMMISSION ATTENDEES: Dennis McCoskrie, ESEE

NON-COMMISSION ATTENDEES: See Attached Meeting Roster

SUMMARY OF MEETING:

The stated purpose of this meeting was to vote on proposals to change NFPA-73, which was first issued in January of 1994. These proposals have been submitted by electrical inspectors, home inspectors and others concerned with safety inspections and repairs to older homes' electrical wiring. This meeting is the first step in the revision process, which is expected to be on a three-year cycle, like the National Electrical Code (NEC).

Partly because new members have been added to this committee since its last meeting in May, 1993, the beginning of the meeting was devoted to reviewing the history of the committee's origins and actions. The discussion resulted in a vote by the committee approving a request to change the scope of NFPA-73 to delete the present exemption of manufactured homes and floating dwellings from this code. To become effective, this change would have to be approved by overseeing committees of the NFPA .

During the discussions of the twenty-eight proposals, concerns about a basic conflict were repeatedly expressed. It was noted that many additions and improvements seem desirable to strengthen the safety impact of NFPA-73. Many committee members expressed concern, however, that no "authority having jurisdiction"¹ has yet legally adopted this code, even though some jurisdictions have started consideration of adoption.

¹"Authority having jurisdiction" is a term employed by the electrical code and enforcement community to represent the many different governmental bodies and other inspection agencies exercising jurisdiction over electrical installations.

Further, concern was expressed that broadening the coverage of the code would be viewed as increasing the cost of performing the inspections and the corrective repairs and so increasing resistance to adoption.

In response to specific proposals advocating use of more precise language and requirements in NFPA-73, the committee voted to remove the terms "adequate" and "excessive" from the Definitions section and to substitute other language in parts of the code where these terms now appear.

For this and other reasons all of the proposals submitted that included mandatory references to NFPA-70, National Electrical Code, (NEC) were either rejected or amended to try to specify the intended requirements in ways that do not require reference to the NEC, which is primarily intended to govern new construction. One exception, that permits optional reference to the NEC, cites the use of tables and calculations provided in that code, to determine if the capacity of the home's electrical service is safe to supply the "computed load" calculated from the floor dimensions, ratings of dedicated circuits for major electrical appliances, and other factors.

The committee rejected the proposal submitted by a CPSC staff member. There was substantial support for testing outlet polarity and neutral-to-ground continuity with a simple inexpensive tester, if substantiation were provided to establish that these tests would materially reduce hazards. Discussion of an electrical load test with a 5% voltage-drop limit led to general agreement that few older homes, and not many newer homes, would pass this test, which is not mandatory under the NEC. Opinions were expressed that severe voltage drops indicate problems that may be hazardous, but that quantitative data linking load-test drop to hazards is lacking at present.

The committee requested the CPSC representative to try to obtain specific data that break down the home electrical-distribution-system fires, casualties and cost totals to portions that are attributed to manufactured homes, to floating dwellings, to multifamily homes, and to other one- and two-family dwellings. In addition, data were requested that would identify the incidence of shock and electrocution accidents associated with reversed polarity and ungrounded neutral connections in home systems.

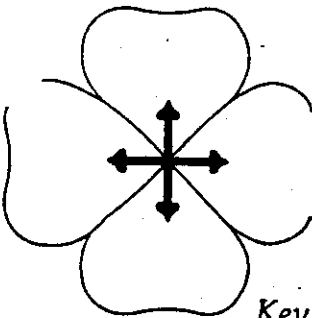
The details of the disposition of the twenty eight submitted proposals and other proposals submitted by the committee during the meeting will be published subsequently by the NFPA. The ballots during the meeting are provisional; the recorded balloting will be conducted by mail. The CPSC representative is a non-voting member of the NFPA-73 Committee.



The American Society of
Mechanical Engineers

345 East 47th Street, New York, NY 10017

NON-PROFIT ORG
U.S. POSTAGE
PAID
American Society
of
Mechanical
Engineers



SERAD

WILLIAM L. ROWE
4517 AIRLIE WAY
ANNANDALE

10-7521/SERAD
VA 22003-3550

Key to Accident Prevention

Safety Engineering and Risk Analysis Division Newsletter

Winter '94/'95

Howard Gage, Editor

designing automatic machinery, robotic equipment, as well as anthropotics.

Handbook of Design, Manufacturing and Automation—Edited by Richard C. Durf and Andrew Kusiak; Published by John Wiley & Sons, New York, N.Y., 1200 pp., \$125.

The Handbook of Design, Manufacturing and Automation is concerned with the organization and transformation of resources into useful products and goods. The stated goal of this volume is to provide up-to-date answers to the problems arising in design, operations, and management of products and manufacturing systems.

Each of the 49 topics is addressed by a distinguished technical specialist in the field. The majority of the authors are associated with prestigious universities. The subjects are treated as a series of lectures that vary in the extent of their technical depth. The overall impression is that the topics are being presented as papers given at a seminar rather than as a coordinated treatise of a very complex topic. Better bridging of the topics would have been desirable. A more rigorous treatment of the topics presented would require a series of volumes rather than one handbook. Therefore this handbook should be considered as a one sigma approach to a series of demanding technical subjects.

The volume is well written and largely achieves the stated goals.

Edward S. Charkey, P.E.
Book Review Editor

NFPA 73—A New Standard

Many owners of older homes have "upgraded" their electrical service from the older 115 volt systems to the newer 230 volt systems. During this conversion the protective fuses are usually replaced by modern circuit breakers and additional electrical branches added to the system. However, the old electrical conductors are frequently left within the walls of the building. In some cases they may be 70 years old, and the insulation cracked and frayed. Some additional problems that are associated with the electrical systems of older homes are improperly fastened exterior cables, mechanically defective breaker (or fuse) boxes, poorly added electrical branches, deteriorated grounding connections, and wired wall receptacles.

(continued on page 3)

NFPA 73—A New Standard

(continued from page 2)

The National Fire Protection Association (NFPA), in conjunction with other safety organizations, has decided to address this problem by developing a new standard, "Residential Electrical Maintenance Code for One- and Two-Family Dwellings" (NFPA 73). The purpose of the Code is to provide requirements for evaluating installed electrical systems within existing dwellings to identify safety, fire, and shock hazards.

The U.S. Consumer Product Safety Commission (CPSC) indicated that the frequency of electrical system fires was disproportionately high in homes more than 40 years old. The CPSC estimated that in 1989, there were about 42,400 fires in homes due to defective electrical distribution systems. These fires resulted in 480 deaths, 1,340 injuries and \$529 million in property losses. The total annual cost to society was approximately \$1.5 billion. In addition, more than 30 electrocutions annually are attributed to faulty electrical wiring systems.

The NFPA 73 Code is a voluntary standard. Consequently, before it can be enforced it must be adopted by and incorporated into state and local building codes. The CPSC has given this program a high priority and has contacted state and local building officials to urge adoption of the code. If this document is made part of local and building codes, mandatory electrical inspections of resold homes may be a prerequisite for their sale.

Ed Charkey

Research Efforts on Risk Expand

The ASME Research Task Force on Risk-Based Inspection Guidelines celebrated its 5-year anniversary at the November 1993 ASME Winter Annual Meeting. The research group, chaired by Ken Balkey of Westinghouse Electric Corporation, has been working to determine appropriate risk-based methods for developing inspection guidelines. Three publications have been produced:

"Risk-Based Inspection—Development of Guidelines, Volume 1, General Document," CRTD-Vol 20-1, 1991;

"Risk-Based Inspection—Development of Guidelines, Volume 2-Part 1, Light Water Reactor (LWR) Nuclear Power Plant Components," CRTD-Vol 20-2, 1992;

"Risk-Based Inspection—Development of Guidelines, Volume 3, Fossil Fuel-Fired

Electric Power Generating Station Applications," CRTD-Vol 20-3, 1994.

Any of the documents can be ordered through the ASME order department (1-800-THE-ASME).

Sponsors of the Task Force include: U.S. Nuclear Regulatory Commission, National Board of Boiler and Pressure Vessel Inspectors, Industrial Risk Insurers, American Nuclear Insurers, Hartford Steam Boiler Inspection & Insurance Company, Pressure Vessel Research Council, American Petroleum Institute, National Rural Electric Cooperative Association, U.S. Department of Energy, Edison Electric Institute, and the Empire State Electric Energy Research Corporation.

Members of the Task Force have been working with a recently formed ASME Section XI Working Group on Implementation of Risk-Based Inspection to determine approaches for making recommended changes to the ASME Code for inspection of Nuclear Power Plant Components. Under the leadership of Fred Simonen and Dr. Truong Vo of Battelle Pacific Northwest Laboratory, Alex McNeill of Virginia Power, the Task Force used results from a pilot application of risk-based inspection methods at Virginia Power's Slurry-1 plant to develop conceptual inspection tables for ASME XI. Results of comparing a risk-based program with the current Code requirements have demonstrated the potential safety and economic benefits of a risk-based approach.

The research group is currently working with the U.S. Nuclear Regulatory Commission and the Electric Power Research Institute to develop a strategic plan for fully implementing risk-based inspection approaches into the ASME Code and into utility inspection programs. Three to four additional pilot applications of the risk-based inspection process are being sought to provide a technical basis for making comprehensive changes to ASME Section XI. The results of this effort will be reported in the group's Volume 2-Part 2 publication for nuclear components in 1995.

Building on the methods in the Volume 3 fossil document, which was coordinated by Dr. David Harris of Engineering Mechanics Technology, Inc., a new research task force was recently approved to develop a handbook for fossil-fueled power plants. This project, chaired by Michael Schmidt of Industrial Risk Insurers, will provide the risk-based methodology in a format that is directly useful to a fossil power plant engineer.

The ASME Board on Research and Technology Development approved a project to develop risk-based inspection guidelines for nuclear and fossil power plants, as well as fuel processing facilities.

26/23/95 75151

The Council of
State Governments
Headquarters Office



MEMORANDUM

Chair
Rep. Robert C. Hunter, NC

President
Gov. Ben Nelson, NE

Executive Director
Daniel M. Sprague

TO: Corporate Representatives
FROM: Senator Kemp Hannon, Chairman
DATE: December 12, 1994
RE: Update on Suggested State Legislation Activities

First Scope and Agenda Subcommittee Meeting for the 1996 SSL Cycle

Headquarters Office
3560 Iron Works Pike
P.O. Box 11910
Lexington, KY 40578-1910
(606) 244-8000
FAX (606) 244-8001

Eastern Office
5 World Trade Center
Suite 9241
New York, NY 10048
(212) 912-0128

Midwestern Office
641 E. Butterfield Rd.
Suite 401
Lombard, IL 60148
(708) 810-0210

Southern Office
The Lenox Building
3399 Peachtree Rd., N.E.
Suite 810
Atlanta, GA 30326
(404) 266-1271

Western Office
121 Second St.
3rd Floor
San Francisco, CA 94105
(415) 974-6422

Washington Office
Hall of the States
444 Constitution Ave.
Suite 401
Washington, DC 20501
(202) 624-6400

Attached, for your information, is a summary of the Suggested State Legislation Scope and Agenda Subcommittee meeting, along with the disposition of items considered at the December 3 session. That meeting, which was held in Pinehurst, North Carolina, in conjunction with The Council of State Governments Annual Meeting, was the first screening session for the 1996 SSL volume cycle.

Of the 75 items considered by the Subcommittee, 26 were referred to the full SSL Committee for consideration during its 1995 SSL Annual Meeting; 18 items were deferred for further consideration by the Subcommittee at its spring meeting in April, the second screening session for the cycle; and the remaining items were rejected for this cycle.

Second Call for Submissions to the 1996 Volume Cycle

Your continued assistance is needed in identifying appropriate items for consideration by the Subcommittee at its spring meeting. In identifying legislation for submission, please refer to the criteria used by the Committee in its selection process. To facilitate the selection process and review of items, it would be particularly helpful if you could provide information concerning the current status of each item; a list of other states with similar legislation; and any available summaries or analyses of the legislation.

Please send all legislation and accompanying materials by **FEBRUARY 28, 1995** to: Joan Minton, The Council of State Governments, Iron Works Pike, P.O. Box 11910, Lexington, KY 40578-1910; (606) 244-8163.

Next Scope and Agenda Subcommittee Meeting

The second meeting of the Scope and Agenda Subcommittee for the 1996 cycle will be held in conjunction with the other CSG National Committee and Task Force Meetings, ~~April 20-22, 1995 in Stuart, Florida~~. Additional meeting information will be distributed later.

Thank you for your continued assistance and support.

SUGGESTED STATE LEGISLATION - 1996

The Council of State Governments

SECOND CALL FOR SUBMISSIONS TO 1996 VOLUME CYCLE

Since 1941, The Council of State Governments (CSG) has published an annual volume of draft legislation on topics of major governmental interest. Each volume can be looked upon as a guide to areas of broad current interest in the states and as a source of innovative ideas. Items appearing in this publication are selected by the Council's **Committee on Suggested State Legislation (SSL)**, which is comprised of state legislators, legislative staff members and other officials representing the states and other U.S. jurisdictions.

Issues considered by the Committee and published as suggested legislation are offered as an aid to state officials interested in drafting legislation in a specific area, and should be viewed against the backdrop of existing state policies, practices, and statutory and constitutional requirements. In reviewing the submissions and determining their appropriateness for publication in *Suggested State Legislation*, the Committee employs the following criteria:

Is the issue a significant one facing state governments?

Does the issue have national or regional significance?

Are fresh and innovative approaches available to address the issue?

Is the issue of sufficient complexity that a bill drafter would benefit from having a comprehensive draft available?

Does the bill represent a practical approach to the problem?

Does the bill represent a comprehensive approach to the problem or is it tied to a narrow approach that may have limited relevance for many states?

Is the structure of the bill logically consistent?

Are the language and style of the bill clear and unambiguous?

We would appreciate your assistance in identifying such legislation.

Please direct the item(s)* and accompanying materials [such as information on the current status of the legislation, an enumeration of any other states with similar provisions, and any summaries or analyses of the legislation that may have been undertaken] to:

Joan Minton
Suggested State Legislation Program
The Council of State Governments
Iron Works Pike, P.O. Box 11910
Lexington, Kentucky 40578-1910
(606) 244-8163

~~We would appreciate receiving the items BY FEBRUARY 28, 1995.~~

Thank you for your assistance.

*Photocopies must be legible. If available, text created via word processing software may be submitted as an ASCII file on floppy disk.



U.S. CONSUMER PRODUCT SAFETY COMMISSION
WASHINGTON, D.C. 20207

March 23, 1995

Ms. Mandy Engel-Cartie
Suggested State Legislation Program
The Council of State Governments
Iron Works Pike, P.O. Box 11910
Lexington, Kentucky 40578-1910

Dear Ms. Engel-Cartie:

The staff of the Consumer Product Safety Commission (CPSC) submits the enclosed model bill and accompanying materials for inclusion in the 1996 volume of draft legislation to be published by your organization. The enclosed bill addresses the large number of fires in houses more than 40 years old by requiring a simple visual inspection of the wiring of older homes before reconnection of the house to the electrical utility or transfer of the electrical utility to another occupant.

Please feel free to contact me regarding any questions you may have about this submittal.

Sincerely

A handwritten signature in black ink, appearing to read "Robert L. Northedge".

Robert L. Northedge, Manager, Home
Electrical System Fires Project,
(301) 504-0508 x1302

Enclosures:

1. Model Legislation to Require an Electrical Inspection of Older Residences to Eliminate Flagrant and Conspicuous Fire Hazards
2. Criteria for Suggested State Legislation
3. Legislation Analysis
4. NFPA 73 Residential Electrical Maintenance Code for One- and Two-Family Dwellings, 1994 Edition.
5. Discussion of Related Legislation Promulgated by the Authority Having Jurisdiction
6. CPSC's Project, Home Electrical System Fires

Model Legislation to Require an Electrical Inspection of Older Residences to Eliminate Flagrant and Conspicuous Fire Hazards.

The Code of (STATE) is amended by adding a section number xxxxxx as follows:
par. xxxx: Electrical inspection of buildings prior to electric utility reconnection.

Buildings Requiring Inspection:

The (appropriate state department) shall promulgate regulations (cite authority to do so) requiring an electrical inspection of any building being occupied as a residence older than forty (40) years as of the effective date of this law.

When Inspection is Required:

Such inspections shall take place before electric service can be restored to a building from which such service had been discontinued or transferred for any reason other than nonpayment of service bills, including but not limited to changes in occupancy.

The Inspection Code:

Such inspections shall be conducted in accordance with the provisions of the current edition of the National Fire Protection Association Residential Electrical Maintenance Code for One- and Two-Family Dwellings, NFPA 73.

Who Can Perform Inspections:

Inspections shall be performed by any organization or individual(s) determined to be qualified by the (local building official or equivalent within the state), including the electric service provider (henceforth identified collectively as "the inspector").

Procedures:

The regulations shall specify all necessary procedures required to carry out the intent of this law while minimizing the impact on the current or prospective occupants of the building. The regulations shall consider procedures that allow for temporary [not to exceed sixty (60 days)] electric utility connection pending hazard correction(s) if undue hardship would result to current or prospective occupants.

Cost and Responsibility:

The regulations shall specify a maximum cost the inspector is permitted to charge for inspection (including reinspection, if required) based on the size of the building and prevailing rates for the geographic area. Cost for inspection and any correction of hazard(s) required to pass such inspection shall be the responsibility of the entity holding title to the building.

Waiver:

For each required inspection a waiver shall be granted for a building failing an inspection, once the entity holding title provides proof of expenses (exceeding a specific amount to be established by the regulations, based on the geographic area) for correction of hazard(s). The waiver shall remain in effect until reinspection is required as specified under **Exception** or until an event occurs as specified under **When Inspection is Required**.

Exception:

Buildings having been inspected under this law need not be reinspected for five (5) years from the date of that inspection, unless a waiver exists (refer to **Waiver**) or unless a fire occurs in the building that prompts disconnection of the electric utility service.

Criteria for Suggested State Legislation

1. Is the issue a significant one facing state governments?

The issue of electrical wiring fires in older homes continues to be a significant problem throughout the United States. The most recent estimates of fire statistics by the Consumer Product Safety Commission (CPSC) based, in part, on fire incident data compiled by the National Fire Protection Association (NFPA) indicate there were 41,000 electrical fires in the wiring systems of homes throughout the United States in 1992. These fires resulted in 320 deaths and 1,630 injuries and property loss amounting to \$511 million, with a total annual cost to society of \$2.2 billion. Fire from electrical wiring in homes is the third leading cause of fire deaths for children under five. The first and second causes are children playing and heating products. Although home fires have declined over the last ten years, deaths from electrical wiring fires in homes show no downward trend.

A comprehensive study by CPSC in earlier years indicated that the fire risk was disproportionately high for homes more than 40 years old. Approximately one third of the housing in the U.S. falls into that category. The study concluded that in older homes that experienced electrical fires, most electrical systems have never been inspected or rehabilitated since the time of the original construction.

2. Does the issue have national or regional significance?

The issue of electrical wiring fires in older homes is a national issue as indicated by the fire statistics cited under question 1. The problem becomes more pronounced in those areas of the country having higher concentrations of older housing in low-income neighborhoods.

As housing in the U.S. ages the problem will continue to grow unless intervention measures are adopted. Electrical wiring systems wear out with age and use. Therefore, over time, the electrical system will fail. At the least, the failure causes inconvenience when parts of the electrical system stop working. At the worst the failure causes a major conflagration in the home, resulting in death and injury.

3. Are fresh and innovative approaches available to address the issue?

In January 1994, NFPA issued the first edition of NFPA 73, Residential Electrical Maintenance Code for One- and Two-family Dwellings. This first edition has been approved by the American National Standards Institute. The code is offered for use in law and for regulating purposes in the interest of life and property protection. The code was developed as a result of the united efforts of various insurance, electrical, construction, inspection, utility, and other allied interests, including CPSC.

The code development was initiated in response to data obtained from studies conducted on residential fires by the NFPA, the National Institute of Standards and Technology (NIST), the CPSC, and other groups involved with fire investigations.

4. Is the issue of sufficient complexity that a bill drafter would benefit from having a comprehensive draft available?

The issue can be quite complex when considering questions such as:

Which buildings require inspection?

When should the inspection be required?

What code or document should be used as the bases for inspection?

Who should do the inspection?

Who should pay for the inspection and any corrective measures needed to improve fire safety?

How often should an inspection be required?

Should there be a dollar limit on the amount needed to be spent on any one inspection?

The model bill provides guidance on these questions and stipulates promulgation of specific regulations to carry out the law.

5. Does the bill represent a practical approach to the problem?

The bill represents a practical approach by specifying an inspection code (NFPA 73) containing about fifty (50) simplified requirements that will identify real-life safety related problems known to cause fires in wiring systems of homes. The code specified in this bill does not attempt to bring the existing dwelling up to new-construction standards that can be found in the National Electrical Code, NFPA 70. (The national electrical code is another document published by NFPA on a three-year cycle and is adopted by many states and/or jurisdictions within the states for electrical wiring in new construction). To bring existing construction up to new construction standards can be impractical because the cost could be prohibitive.

In addition, the bill is practical in that it includes a provision for limiting the amount a property owner would be required to spend in order to comply.

Further, the bill provides a practical approach by specifying those homes most in need of inspection (homes older than 40 years). Other homes could benefit as well; however, the payoff is greater for the older homes identified. In addition, the burden on the inspection system is reduced. Of course, if local conditions demonstrate the need for a different age criteria, the bill is sufficiently flexible to permit it.

6. Does the bill represent a comprehensive approach to the problem or is it tied to a narrow approach that may have limited relevance for many states?

The bill provides a comprehensive approach in that it identifies: (1) the dwellings in most need of inspection, (2) when an inspection would be required (3) the document to be used for the inspection (4) who can perform the inspections (5) the responsibility for the cost of inspection and any needed corrections and finally (6) the need to promulgate specific regulations for details that fit best with the current state systems being used to control building construction and safety.

7. Is the structure of the bill logically consistent?

The bill's structure provides for a natural progression of the bill's intent by presenting "who", "what", "when", and "how" with exceptions, any of which can be modified to suit local situations.

8. Are the language and style of the bill clear and unambiguous?

The language and style used in the bill are clear and unambiguous.

Legislation Analysis

The legislation stipulates very specific criteria that must be met for an electrical inspection of old residential buildings. However, recognizing that local governmental departments and administrative procedures can differ, the legislation specifies that the appropriate state department shall promulgate regulations to carry out the law.

The legislation establishes a process for helping to prevent fires in older homes by requiring a unobtrusive, visual inspection of the electrical wiring in the home. The inspection criteria specified in the legislation is NFPA 73, Residential Electrical Maintenance Code for One- and Two-Family Dwellings published in January 1994 by the National Fire Protection Association.

The legislation targets homes older than forty years. Although any home can benefit from such an inspection, studies have shown that the highest rate of fires occurs in homes older than forty years. The age of the home can be changed as local circumstances dictate.

Various approaches could be used to trigger an inspection. This legislation triggers the inspection when there is a request to restore or transfer to another name the electric utility to a residential building. Disconnection of the utility service due to nonpayment and subsequent request for reconnection would not trigger an inspection. Examples of when an inspection would be required include:

- a fire occurred in the building and the electric utility was disconnected with a subsequent request for reconnection
- prospective occupants of the building request the utility service be transferred to their name (tenant or owner)

The legislation specifies that the inspection shall be performed by anyone determined to be qualified by the local building official or equivalent within the state. It is anticipated that the regulations promulgated by the state will identify those acceptable organizations. The legislation specifies that the electric service provider would be acceptable to perform these inspections since they will play a key role in the process. However, training and guidelines for the inspection will be required in order to make the determinations called for by the inspection code.

The legislation provides for cost control on the inspection and any reinspection of correction(s), if required. Since the actual cost limit can vary depending upon the geographic area, it is left open for the State Authority to determine. The legislation does, however, specify that the cost shall be based on the square foot of the inspected building.

The legislation specifies that the cost of inspection and any correction(s) shall be the responsibility of the entity holding title to the building. It is anticipated that the cost for correction(s) can be minimal in many cases if the inspector adheres to the intent of NFPA 73 "... to require only remedial action necessary to correct the identified hazards." However, in those instances where more extensive, and therefore costly, corrections are needed, the legislation provides for a waiver once the entity holding title spends a specific dollar amount to be based on the geographic area and specified in the promulgated regulations.

Further, it is anticipated that in those States or local jurisdictions that fund home rehabilitation, the promulgated regulations for this legislation would provide for the funding for inspection and correction(s) for qualifying entities that hold title.

In addition, to expand the use of the inspection code to home owners that would not be affected by this legislation and who may want to improve safety conditions in their home, the States or local jurisdiction may want to consider instituting **Incentive Programs**. For example:

- Property tax allowance for the costs of fire-hazard corrections by qualifying home owners
- Income tax allowance for the costs of fire-hazard corrections by qualifying home owners
- Grants or low-interest loans to qualifying home owners for correcting fire-hazard conditions
- State insurance regulator encouragement of fire-insurance providers to provide fire insurance premium reductions for homes that pass a NFPA 73 inspection

Finally, recognizing that some of the events, such as utility name transfer, that could trigger an inspection may occur frequently, the legislation provides for an inspection exemption for five years. The five-year exemption does not apply if a waiver had been granted on the building or if a fire that prompts disconnection of the electric utility service occurs in the building. The five-year period corresponds to the average period of home ownership as published by the National Association of Realtors.

In conclusion, the drafters of this legislation and of the inspection code (NFPA 73) stipulated in the legislation have tried to strike a balance between all facets of safety provided for new construction and the extremely hazardous conditions known to exist in many older homes. The drafters have tried to offer legislation that will correct hazardous conditions to a reasonable level while limiting the cost impact. The legislation provides an opportunity for the States to establish a mechanism to reduce the significant number of fires identified by the Consumer Product Safety Commission and others as occurring in older homes. This population is increasing in the United States. The legislation provides various accommodations to local needs and conditions while still maintaining the basic concept of inspecting older homes to an accepted code published by the National Fire Protection Association.

Discussion of Related Legislation Promulgated by the Authority Having Jurisdiction

1. Shaker Heights, Ohio - CHAPTER 1415, Certificate of Housing Inspection at Time of Sale. The ordinance is in effect, with parts dating back to 1976. The ordinance requires a residential property inspection prior to sale. The ordinance requires an inspection of virtually all aspects of the property. The structures and premises of the property are inspected in accordance with the Building Code, the Housing Code, the Zoning Code and other applicable ordinances of the City of Shaker Heights.

2. Cleveland Heights, Ohio - Authorization by City Council to inspect dwellings under the Point-of-Sale and Systematic Inspection Programs. The authorization is in effect. The authorization requires rental properties to have a new inspection every three (3) years regardless of the status of the last inspection. The standards of compliance are drawn from the Regional Ohio Building Code, the Regional Dwelling House Code, Additional Standards for Multiple Dwellings of the City Housing Code, and the Basic Standards for Residential Occupancy. The inspection includes the electrical, mechanical and structural aspects of the dwelling.

3. Virginia - House Bill NO. 891, A bill to amend the Code of Virginia by adding a section numbered 36-99.2:1, relating to Uniform Statewide Building Code; reinspection of certain buildings. The bill was held over for further study and will be considered again by the Virginia House. The bill calls for promulgation of regulations requiring reinspection of any building before service can be restored to an electric or gas utility installation from which electrical or gas services had been discontinued or transferred for any reason other than nonpayment of service bills, including by not limited to changes in use or occupancy. The buildings are to be inspected in accordance with the Uniform Statewide Building Code of Virginia.