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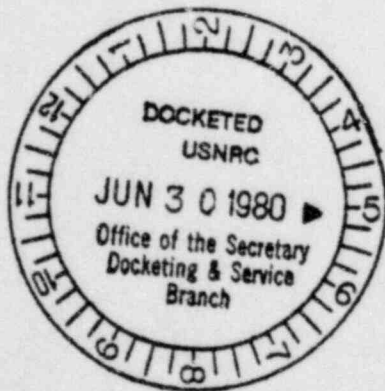
Samuel J. Chilk
Secretary of the Commission
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

Dear Mr. Chilk:

In response to the Commission's request for public comments on 10 CFR Part 50 concerning a fire protection program for nuclear power plants operating prior to January 1, 1979, attached is the position of EEI on behalf of its membership. We appreciate the opportunity to provide you with our thoughts on these proposed rules and your consideration of them.

Sincerely yours,

John J. Kearney, Jr.
John Kearney, Jr.
Senior Vice President



L-41, Pt. 50

*Acknowledged by card... 7/1/80. mdv...

UNITED STATES OF AMERICA
BEFORE THE
NUCLEAR REGULATORY COMMISSION

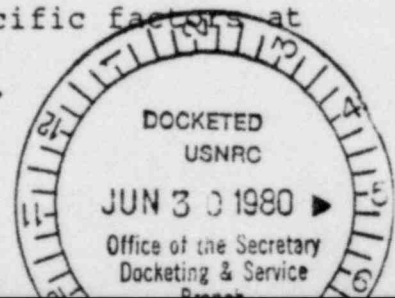
Proposed regulations)	10 CFR, Part 50, Appendix R
concerning the fire)	(45 Fed. Reg. 36082
protection program)	May 29, 1980).
for nuclear power)	
plants operating prior)	
to January 1, 1979)	

The Edison Electric Institute (EEI), the national association of the investor-owned electric utility industry, submits these comments in response to the Notice of Proposed Rulemaking which was issued by the Nuclear Regulatory Commission (NRC) on May 29, 1980, 45 Fed. Reg. 36082.

The EEI member companies serve 99 percent of all customers of the investor-owned segment of the industry and 77.5 percent of all users of electricity in the United States. Many of the Institute's member companies generate a portion of their customers' needs with nuclear power facilities.

I. Introduction

EEI and its members support sound fire protection measures at nuclear power plants. In fact, member companies have worked cooperatively with NRC Staff and have implemented many improvements in fire protection techniques during the past several years. The working relationship with the Staff has been such that sound fire protection standards accounting for site-specific factors at existing nuclear units are being implemented.



NRC'S decision to pursue rulemaking for 17 fire protection issues is a departure from the Commission's past practice in specifying standards for nuclear units through regulatory guidelines. In pursuing this approach we trust that the worthwhile attributes of the prior approach will not be lost. Particularly, we are concerned the flexibility to accommodate particular standards to the site-specific constraints at existing units be maintained. Furthermore, we hope that the reliance which operators have felt justified in placing upon prior Staff determinations in the fire protection area and other areas will not be shattered by an arbitrary abrogation of those standards agreed to in Staff Safety Evaluation Reports (SER).

While we endorse and encourage sound fire protection standards, we have particular procedural and substantive objections to the standards as incorporated in NRC's proposed regulations. The general objections concern, (1) the inadequacy of the technical data and justification supporting the proposed rules, (2) the abbreviated 30-day comment period, (3) abrogation of existing SER's, (4) the arbitrary November 1, 1980 implementation deadline, (5) the need for more flexibility in adoption of standards, (6) the use of an adjudicatory hearing where retrofitting and license amendments are necessary, and (7) the failure to provide an adequate value impact assessment and NEPA evaluation. These objections are developed in the "general comments" which follow. Specific comments concerning the substance of the proposed standards are set forth under the "detailed comments" infra.

II. General Comments

Inadequate Preamble

EEI believes that the preamble to the proposed rules is legally inadequate. It fails to explain the technical basis or rational for the standards proposed in Appendix R. Instead it simply paraphrases those standards. The technical basis and rational supporting such requirement 50 feet of clear air space are not given (Appendix R, section II.E.) What is the technical basis for establishing a 50 foot separation standard rather than 20 feet or 70 feet? It is impossible to provide a meaningful evaluation of and make intelligent comment on this or any minimum separation distance standard without knowledge of NRC's basis.

This same shortcoming arises at other places in proposed Appendix R. Not technical explanation is given supporting the requirement that the fire main loop distributing water to the automatic and manual suppression systems must in all cases be underground. (Appendix R, Section III.A.) No basis is given for requiring two fresh water supplies rather than fresh water and brackish water supply systems. (Appendix R, Section III.A.) The requirement for sealed beam or florescent units with individual 8-hour minimum battery power supply is unsupported by technical justification. (Appendix R, Section III.J.) No basis or technical justification for requiring the pressure differential test in Section III N.5. is provided.

The preamble is also deficient for its failure to explain the basis for certain novel requirements not previously subject to public debate. These include requirements for separation, ("...50 feet both horizontal and vertical of clear air space..."); ^{1/} for a "pressure differential across" ^{2/} a fire barrier penetration during qualification testing; for consideration of associated circuits, ("If associated circuits...they shall be considered safe shutdown circuits"); ^{3/} and the general application of the provisions to "safety related" and those "important to safety" as well as "safe shutdown" structures, systems and components. NRC has provided no technical rationale for these proposals. Instead, it has mandated the minimum 30 day comment period which is inadequate for purposes of preparing a careful technical evaluation of difficult engineering requirements for which no technical justification is offered.

Courts have recognized that significant technical literature must be cited at the time of the proposed rulemaking in order to allow the public an opportunity to provide meaningful comments. The U.S. Court of Appeals for the Second Circuit voided a regulation when "interested parties were not informed of the scientific data, or at least a selection of such data deemed important by the agency, so that comments could be addressed to the data."^{4/}

^{1/} 45 Fed. Reg. 36086

^{2/} 45 Fed. Reg. 36089

^{3/} 45 Fed. Reg. 36090

^{4/} United States v. Nova Scotia Food Products Co., 568 F.2d 240, 251 (2nd Cir. 1977); accord, Portland Cement v. Ruckleshaus, 486 F.2d 335, 393 (D.C. Cir. 1973).

This is not a case where the proposed standards are based upon detailed statutory requirements or on commonly accepted knowledge and background literature in the public domain; factors which may justify an agency's failure to disclose technical and scientific bases at the proposed rulemaking stage. Nor is it a case in which abbreviated statutory deadlines may justify such failures.

The NRC's failure to disclose the technical basis for the standards it proposes to adopt prevents those who will be directly affected by them from offering meaningful comment. Should NRC proceed to adopt these requirements, operators of nuclear power plants will be prejudiced. Extremely costly and difficult retrofitting of existing facilities with associated unit shutdowns will result in order to comply with requirements that may have no technical justification.

Complex engineering considerations are an issue in many of the proposed standards. Whether a technical basis exists for them and whether they can be implemented at existing facilities are questions which call for a full public airing. Whether existing nuclear units can be retrofitted in accordance with these standards without jeopardizing other safety features incorporated in the plants as presently designed is of serious concern to this industry. We assume it is also of concern to NRC. That being the case, NRC should not adopt these standards before setting forth their technical basis and reviewing meaningful responses from industry and other experts.

NRC's failure to provide the minimum public notification of the bases and rationale for its proposed standards compels their reproposal. Reproposal of the standards should follow reconsideration and incorporation in a new preamble of sufficient technical data and explanation upon which meaningful comment can be made. Furthermore, the comment period for such reproposed standards should be long enough to allow a careful, studied evaluation and response by interested parties. As noted elsewhere, the unrealistically rigid November 1, 1980 implementation date cannot be met and should not be allowed to stand in the way of judicious debate and resolution of these significant issues.

The Abbreviated 30 Day Comment Period,
Based on False Premises, Is Wholly Inadequate

The Commission has chosen to restrict the comment period severely on this document based on two basically false premises -- (1) "The position of the staff and the licensees regarding the provisions of this rule is documented and well known."^{5/} and (2) "...the public has been afforded several opportunities to comment on the provision of the rule."^{6/} While it is true that many of the "issues involved are well known and have been under discussion for several years..."^{7/} many of the particular solutions in the proposed regulation and some of the issues are being proffered for the first time and without supporting technical justification and rationale.

^{5/} 45 Fed. Reg. 36082

^{6/} Id.

^{7/} Id.

The only previous comment periods relied on by the NRC as a basis for shortening this comment period involved draft Regulatory Guide 1.120, "Fire Protection Guidelines for Nuclear Power Plants" and occurred approximately three years ago. Considering the technological changes in the interim, the substantially different requirements as noted above and the change in status from a guideline to a rule, the proposed regulation should have been accorded a longer comment period. EEI would have specifically moved for a longer comment period but, given the Commission's statement in the preamble that, "For these reasons no extension of the comment period will be granted," (45 Fed. Reg. 36082) EEI determined that such a request would have been futile.

Abrogation of Existing SER's is Arbitrary

The Commission has argued the need for a rule making document because "...differences between the staff and the licensees in the interpretation of the staff's guidelines..." have been incapable of resolution. 8/ They readily admit that only 17 generic issues remain unresolved, and that these issues remain in question at only 32 plants. It is also important to note that not all 17 issues are unresolved items at all 32 plants. While the first point has been taken into consideration and the scope of the regulations has been limited to the 17 unresolved issues, the latter circumstance has been ignored and all 17 requirements in the new proposed regulations would be arbitrarily applied to all operating plants.

8/ 45 Fed. Reg. 336083

We totally disagree with this latter action and propose that the regulation be applied only to those 32 plants with unresolved issues and only to the specific unresolved issue or issues at each plant. In addition, it would be appropriate to review the early SER's with respect to these 17 generic issues to determine whether those plants with SER's meet the intent of the proposed regulation. Where the existing SER's proved to be inadequate, application of regulatory standard would be appropriate. This would satisfy the Commission's expressed concern that "There are, however, a few instances where the staff has accepted certain fire protection alternatives that would not satisfy some of the requirements of this proposed rule." 9/ "Across the board" application of the regulation as proposed will result in a significant expenditure (preliminary estimates vary from \$2,000,000 to \$50,000,000 per unit depending on the specific plant design - not including replacement energy costs for the required down time) with little or no commensurate improvement in plant fire protection over that which has been achieved by the design approaches taken in the various accepted SER's.

Implementation is Arbitrary
and Will Force Shutdowns

We are also greatly concerned, as are two members of the Commission, with the proposed implementation schedule. A partial survey of member companies operating nuclear facilities (15),

9/ 45 Fed. Reg. 36083

as well as a partial informal survey conducted by the NRC (22 companies responding), indicated that none of those queried could meet the proposed regulation as written by November 1, 1980. It is generally agreed that if the present schedule is maintained, none of our affected members companies (51 companies operating 58 nuclear plants) would have a nuclear plant in operation on November 2, 1980. In many cases, even if all necessary design and analyses were completed today, equipment would not be available prior to the implementation date. In light of the impact upon consumers and the national economy of shutting down nearly all of the nuclear reactors in the country, we recommend the replacement of an arbitrarily selected implementation date with a realistically achievable schedule based on the extent of the required retrofit for the individual plants affected.

When developing revised implementation schedules consideration should be given to the use of refueling and/or other planned outage periods to accomplish many of the modifications which can only be performed when the units are out of service. The implementation deadline for these regulations is certainly an issue that should be addressed in a value impact assessment.

Adoption of Specific Design Requirements is Unjustified
and Eliminates Flexibility Needed for Site Specific Application

In general, the requirements of the proposed regulation are overly specific and unnecessarily restrictive. In most cases they do not recognize acceptable alternate solutions. Instead they

dictate a particular design approach without consideration of site specific factors. While such an approach may be possible for plants in the design and even construction stages, it is totally unacceptable for existing units. Recognizing that the Staff has had difficulty with "...the interpretation of the staff's guidelines. " 10/ we feel that a more suitable approach would be to restate the regulatory guide to clarify the ambiguities rather than to propose regulations which dictate a specific design approach. The latter procedure is not only unnecessary, it may very well be counterproductive. In these regulations the Staff may be dictating a design that will have a detrimental effect on other safety considerations at some plants. The preamble to the proposed rules does not but should address the effect on other safety systems of retrofitting existing units to meet these requirements.

If a clarification of the existing regulatory guide is unacceptable to the Commission, we recommend that they revise the proposed regulations to establish a set of performance standards, and permit the licensees to select the most appropriate designs to achieve those standards. If the Commission feels compelled to specify designs in certain contexts, then the regulations should include a variance procedure applicable when a licensee demonstrates that the

10/ 45 Fed. Reg. 36083

specified design is not appropriate in a site specific context. In those rare cases where there is only one acceptable solution, we feel it is incumbent on the staff to provide justification for that position. As a minimum, the Commission's requirement of a particular specific design approach should include an evaluation of alternatives that have been considered and found unacceptable. These evaluations should be documented by the Commission and should be available for general review.

Adjudicatory Hearings Could Be Used to Resolve Genuine
and Significant Disputes Regarding Standards in
the Regulations

One procedure for establishing the merits of and justification for standards in the proposed rules would be consideration of them in an adjudicatory, trial-type hearing. The Commission's regulations and due process of the law permit this conclusion. Accordingly, on behalf of our member companies which would be affected by the proposed rule, we respectfully request that the opportunity for such a hearing be made available. We believe this opportunity is required by NRC regulations and due process.

Subpart B of 10 CFR Part 2 imposes on the Commission certain procedural requirements for imposing modifications to a license. 10 CFR 2.204^{11/} provides in pertinent part that where the Commission

^{11/} Although subsection 2.204 is entitled Order for Modifications of License, its application would be necessary to afford the licensee due process regarding any Commission actions which would modify the initial license. The substance of what is required of the licensee is controlling, rather than the label attached to it.

seeks to modify a license, the licensee may demand an adjudicatory hearing. It is undisputed that the proposed regulations would require the retrofitting of certain existing structures and changes in facility technical specifications, thus requiring amendments to existing licenses. Accordingly, 10 CFR 2.204 is applicable.

Although EEI primarily relies on the Commission's regulations to justify the requirement for an adjudicatory hearing for the affected licensees, certain due process considerations also justify that conclusion. Insofar as the rulemaking involves adjudicatory facts as opposed to legislative facts and is to effect different individuals upon individual grounds, due process mandates the resolution of these facts in an adjudicatory proceeding. Zamora v. Immigration and Naturalization Service, 534 F. 2d 1055, 1062 (2nd Cir. 1976); Patagonia Corporation v. Board of Governors of Federal Reserve System, 517 F. 2d 803, 816 (9th Cir. 1975).

The essential point is that the factual information which forms the basis for NRC's proposed standards should be made public and interested persons should have an opportunity to comment upon, and if necessary rebut that information. Alternative, less formal mechanisms may be available and appropriate to accomplish this.

The NRC Value / Impact Assessment of the Proposed Fire Protection Rule is Inadequate and Must be Amended and Republished

As early as 1975, the NRC had recognized the importance and necessity of an adequate and thoroughly prepared value/impact analysis for effective decisionmaking at the NRC. In the United States Nuclear Regulatory Commission Annual Report 1975,¹² the NRC highlighted as one of its accomplishments that:

Impact/value analysis was made an intergal part of NRC decisionmaking to be utilized in policy proposals as well as in assessing other contemplated regulatory actions. This involves a systematic assessment of the values and adverse impacts, including added costs to the public, which can be expected to result from the various alternatives. (p.7)

In 1978, the Commission adopted as policy "that value impact analyses be conducted for any [non-routine and non-recurring] proposed regulatory actions that might impose a significant burden on the public." Guidelines for Conducting Value/Impact Analysis at p. i, iii, and 5 (January 1978).^{13/} "Regulatory action is defined in the Guidelines as "an action taken in direct support of the NRC's mission to protect the safety of, and safeguard the public, and to protect the national security and the environment." The NRC, it seems clear, is required to prepare a value/impact analysis for rules such as the proposed regulations on fire

^{12/} Annual Report was required pursuant to Section 307(c) of the Energy Reorganization Act of 1974.

^{13/} See also, "Value Impact Guidelines", Secy-77-388 (July, 1977) and Secy-77-388A (November, 1977).

protection. Indeed, the NRC Staff has prepared a document entitled "Value/Impact Assessment of Proposed Fire Protection Rule" (Enclosure B to Secy-80-88). However, an objective evaluation of the Staff document in accord with the Commission's guidelines in preparing such documents must lead to the conclusion that it is completely inadequate and must be amended.

The Commission anticipated that the value/impact analysis would contain information sufficient to enable it to compare "consequences associated with alternatives identified to satisfy some objective or to meet some goal." (Guidelines at p. 1). Among those elements required in a value/impact statement are (1) identification and definitions of alternatives, (2) estimates of incremental benefits/values and associated costs/impacts of alternatives, and (3) identification of criteria for assessment or ranking of criteria. (Guidelines at pp. iv-v and Appendix III). The Commission further emphasized the importance of identifying and documenting the alternatives and associated costs and impacts of each. The Guidelines state:

Although consideration of additional alternatives may lead to greater demands on the analysts' time, it is often the case that preliminary analysis will indicate the dominance of one or two alternatives (i.e., one or two that are clearly superior in terms of low costs or high effectiveness). The "inferior" alternatives would require only brief reference in the value/impact statement. (Guidelines at p. 15-16).

The document prepared by Staff is totally devoid of any alternatives to the proposed regulations and consequently the required criteria for the assessment of alternatives. As to

determining and quantifying the associated costs/impacts of the proposed rule, the Staff document is similarly incomplete. While conceding in its value/impact assessment that "Accurate cost estimates are not available at this time..." NRC Staff is of the opinion that "[m]ost licensees...will incur no additional cost associated with this rule." (P. 5). Such an opinion without the benefit of cost estimates is seemingly at odds with any known principles of inductive logic.

Many of the proposed standards will be very costly to implement and their costs should be assessed and weighed against alternatives that might be equally effective. For instance, how do the costs and benefits of a 50 foot clear air space compare with other alternative for achieving the same objective? How do the costs and benefits of underground fresh water systems compare with systems that may be partially above ground? In addition, the implementation deadline and possible alternatives for these regulations is certinally an issue that should be addressed in a value impact assesement.

Because of the abbreviated time period for public comments, EEI has been unable to survey its members and arrive at a reliable cost estimate for these regulations. A very preliminary estimate indicated that adoption of this rule will result in costs of \$2,000,000 to \$50,000,000 per unit depending upon the specific plant design. Such estimates do not include replacement energy costs for the required down time. We anticipate that companies filing comments with NRC will provide individual estimates of their own.

As shown, the Commission's value impact document is grossly inadequate and given the significant costs of the proposed regulations and lack of alternatives considered by the NRC, the document should be redrafted and a more comprehensive analysis undertaken. It should then be published for public comment along with republication of the proposed rules, as recommended above.

The NRC Has Failed to Perform a NEPA Analysis
for the Rulemaking.

An environmental Impact Statement arguably required pursuant to NEPA and 10 CFR 51.5(b)(6) of the Commission's regulations is notably absent. At the very least, if the Commission has decided not to prepare an EIS for this particular action, Section 51.5(c) of the regulations requires that a negative declaration and an environmental impact appraisal be prepared setting forth the NRC basis for concluding that no EIS need be prepared. NRC has failed to adhere to its own regulations, which, of course, are binding upon the agency.

III. Detailed Comments

The following comments apply to the specific standards in the proposed regulation and are listed by item number as they appear in the Federal Register:

Section II.A - Fire Protection Program

Section II.A.2.g is not consistent with Section III.M. The former states "Fire barriers surrounding each fire area shall have

a 3-hour fire rating unless the fire hazards analysis demonstrates that a lesser rating exceeds the duration of the in situ fire load by at least one-half hour." 14/ The latter states that the fire barrier "...shall have a fire rating of three hours unless a lower rating is justified by the fire hazards analysis." 15/ It is suggested the Section II.A.2.g be changed to agree with Section III.M in order that the present difference in language not create ambiguity as to what is intended.

Section II.E - Fire Hazard Analysis

The reference to "50 feet both horizontal and vertical of clear air space..." 16/ should be deleted. This is an example of a new requirement not previously subject to public debate and analysis. In previous informal contacts and documents, 20 feet of clear air space was deemed adequate. No technical support and rationale in the preamble to the proposed rules has been advanced to justify any separation standard much less this very significant increase over the previously understood requirement. Adoption of any distance limitation without technical justification will be arbitrary and will add significantly and unjustifiably to the amount of time and money required for compliance.

14/ 45 Fed. Reg. 36086
15/ 45 Fed. Reg. 36089
16/ 45 Fed. Reg. 36086

Section III.A - Fire Water Distribution System

The statement "An underground yard fire main loop..." 21/ should be changed to read "A yard fire main loop..." Requiring that the loop be placed underground is an unnecessary restriction in plants where the loop may transverse a building or at southern locations where freezing is not a design consideration. A change is suggested also to include allowance for use of brackish water at least during fresh water shortage periods or during fire emergencies, if needed. This will have no adverse impact on the performance of the fire protection system and should actually increase the reliability of some systems in existing facilities.

Section III.B - Sectional Control Valves

Use of non-indicating valves (such as hub-end-gate valves) has long been accepted for use in fire protection systems and should be allowed for use in particular applications in nuclear plants. While we recognize the value of visually indicating valves in general, there are applications, such as valves in roadways (curb box valves), where visually indicating valves might be detrimental to system reliability. System availability in these instances can be assured with adequate surveillance programs.

21/ 45 Fed. Reg. 36086

Section III.E - Hydrostatic Hose Tests

Testing of fire hose should be done at a pressure 50 psig above maximum fire pump operating pressure and not 10 psig above maximum "service" pressure. The term "service" is open to interpretation. If the service and operating pressures are equivalent, a 50 psig test margin is satisfactory. However, as written, it would unduly penalize a more conservative design which utilized equipment with a higher service pressure than operating pressure. Also, the technically unsupported test frequency requirements should be deleted since generally accepted industry standards are available. These standards were developed by industry experts utilizing years of experience and background data and adequately address the topic.

Section III.F - Automatic Fire Detection

This requirement should be restated to avoid imposing mandatory automatic fire detectors where a need for them does not exist. The need for automatic fire detectors should be determined by the individual plant's fire hazard analysis. Also, automatic fire detection systems may not be needed where wet pipe automatic sprinkler protection is provided.

Section III.G - Protection of Safe Shutdown Capability

This Section addresses one of the primary goals of this regulation -- assurance that safe-shutdown can be achieved under postulated fire hazards. However, the level of detail

contained beyond the first paragraph is completely inappropriate to a regulation and should be addressed correctly in a supporting document such as a regulatory guide.

Specifically, to avoid the possible differences in interpretation which this regulation purports to eliminate, the statement "...systems important to achieving and maintaining safe shutdown..." 18/ should be changed to "...systems required to achieve and maintain safe shutdown..." Also, Table 1, is arbitrary and subjective (use of terms such as good, poor) and its attempted application will provide additional sources of confusion both for the Commission as well as the industry. It should be deleted.

Section III.I. - Fire Brigade Training

III.I.3.d requires that a copy of the report on the critique of the fire brigade drills be formally submitted to the NRC for evaluation. This requirement should be changed to reflect the currently acceptable practice for handling of similar reports, i.e., their maintenance in the plant file and availability to NRC inspectors during plant visits. Departure from the standard practice is unjustified (these documents are not more important than critical weld inspection and design verification documents, etc.) and sets precedent for the NRC to be inundated with paper if this becomes general policy.

18/ 45 Fed. Reg. 36087

Section III.J. - Emergency Lighting

NRC has provided no technical justification or rationale in the preamble supporting the requirement for sealed beam or florescent units. The use of U.L. listed or F.M. approved equipment intended for this type of application should be permitted unless some valid technical reason for prohibiting them is given. Otherwise, the prohibition would be arbitrary.

Section III.K - Administrative Controls

The following suggested revision provides performance requirements to be attained without specifying the detailed procedure to be used: "Administrative controls shall be established to minimize fire hazards in areas containing structures, systems and components required for safe shutdown. These controls shall establish procedures to:

1. Govern the handling and limitation of the use of ordinary combustible material, flammable gases and liquids, high efficiency particulate air and charcoal filters, dry ion exchange resins or other combustible supplies in areas containing equipment to be utilized for safe shutdown.

2. Provide for the control of storage of combustibles in areas containing equipment to be utilized for safe shutdown or establish designated storage areas and fire protection therefore.

3. Govern the handling of and limit transient fire loads such as combustible and flammable liquids, wood and plastic

products or other combustible materials in buildings containing safe shutdown systems or equipment during maintenance, modification or refueling operations.

4. Provide for the elimination or control of ignition sources.
5. Identify and define the strategies for fire fighting."

III.K.4 through III.K.12 (pp 36088 & 36089) should be deleted. The information contained in these is overly specific, inappropriate for a regulation and is, in fact, already addressed in the appropriate draft regulatory guide.

Section III.L - Alternate Shutdown Capability

The establishment of detailed requirements and design criteria for alternate shutdown capability is beyond the scope of a fire protection document. Specifically, the time constraints with respect to offsite power availability, hot and cold shutdown maintenance and the requirement for detailed shutdown functions are unsupported, arbitrary and unnecessary extensions of the scope of the regulation. If these requirements are maintained in the regulations, their justification must at least be indicated and available for public review.

Section III.M - Fire Barriers

We recommend deletion of the statement, "Such fire resistance shall be provided by protection equivalent to metal lath and plaster covering." 19/ This is yet another instance where the

document is unnecessarily overspecific and unsupported by technical justification. Also, the term "equivalent" provides additional avenues of interpretation which this regulation was intended to reduce.

The statement "Door openings shall be protected with doors, frames and hardware that have been tested and approved by a nationally recognized testing laboratory to have a fire resistance rating equivalent to that required of the barrier."^{20/} should be changed to recognize acceptable alternatives such as water curtains, lower rated doors for stair towers and other commonly accepted practices.

Also, the phrase "fire door damper"^{21/} in the last sentence should be changed to "fire damper." This will recognize the existence of other acceptable damper types which are now in common use and are equally effective.

Section III.N - Fire Barrier Penetration Seal Qualification

This entire section addresses a technological area that is currently evolving and where detailed test requirements are premature. In particular, Subsection III. N.5 requires fire testing a penetration with a pressure differential across the boundary. This is a relatively recent area of concern. Test methods are currently being refined and the significance of

^{20/} 45 Fed. Reg. Id

^{21/} Id.

test results is being examined to determine their relevance to actual operating conditions. To our knowledge, only one commercial test facility has the capability of performing such tests at this time. Considering that most plants would have to retest their penetrations to meet this specific requirement and normal lead time for obtaining final reports to validate the results is several months, few if any plants could meet the implementation schedule, based on this item alone. Section III.N.8 should be revised to read as follows: "... for a period commensurate with the fire loading determined by the Fire Hazards Analysis." As the acceptance criteria is currently written, it incorrectly implies that all fire barrier penetrations have a 3-hour fire (resistance) rating

Section III.0 - Fire Doors

Revise the first paragraph to state "Fire doors located in fire barriers enclosing areas containing safe shutdown systems of equipment shall be self-closing..." As currently worded, even doors with no fire protection function would be required to be self-closing if they had a fire rating.

Section III.P - Reactor Coolant Pump Lubrication System

The first paragraph of this item allows a choice of providing either an oil collection system or an automatic fire suppression system. The choice clearly deals with fire protection. Additional

information provided in this section, however, introduces the requirements for a design basis for a safe shutdown earthquake (SSE).

The requirements for a SSE do not belong in a document on Fire Protection but in other regulatory guidelines.

EEl suggests deletion of all references to SSE in this section.

Section III.Q - Associated Circuits

Determination of the impact of the requirements described in this section will require a lengthy analysis for those plants not designed with this as a part of their original design criteria. Of necessity this analysis must be site (design) specific. The only general conclusions that can be reached at this time regarding this topic are that, (1) that the implementation date cannot be met for those plants where this was not part of the original design criteria and (2) that much flexibility must be allowed for those plants in determining the detailed design required to meet the criteria set forth in the proposed regulation.

Various Sections

In several areas of the document, the terms "safety-related," 22/ "important to safety" 23/ and "required for safe shutdown" 24/ appear to be used interchangeably in describing the structures,

22/ 45 Fed. Reg. 36082-36090, passim.
23/ Id.
24/ Id.

systems and components to which various sections of the regulations apply. To be consistent and reflect the intent of the previous guidelines, the term "required for safe shutdown" should be used throughout. The term "safety related" is well defined but includes much equipment that is not required for safe shutdown in a fire hazard related context, for example, Emergency Core Cooling Systems (ECCS). Indiscriminate use of the term would, therefore, incorrectly and greatly broaden the intended scope of the regulation. The term "important to safety" is objectional on the basis that it is not a common, well defined term and its use would introduce additional undesirable ambiguities.

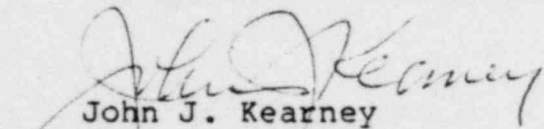
IV Conclusion

In summation we wish to emphasize the following major concerns:

- 1) We question the need for the regulation in light of our arguments and suggested alternate approaches;
- 2) If the Commission feels compelled to issue a regulation on this subject, a more realistic compliance date must be established; and
- 3) The necessary revision to the regulation should be followed by an additional comment period more appropriate to the complexity of the issues raised.

The Edison Electric Institute wishes to thank the Commission for the opportunity to respond on behalf our member companies to this most significant fire protection regulation.

Respectfully submitted,


John J. Kearney
Senior Vice President
Edison Electric Institute