



POLICY ISSUE
(Notation Vote)

December 19, 1985

SECY-85-306P

For: The Commissioners

From: William J. Dircks
Executive Director for Operations

Subject: STAFF RECOMMENDATIONS REGARDING THE IMPLEMENTATION OF
APPENDIX R TO 10 CFR 50

Discussion: At the October 3 briefing of the Commission on SECY-85-306, Staff Recommendations Regarding the Implementation of Appendix R to 10 CFR Part 50, we discussed and recommended an approach not specifically identified in the SECY paper. We indicated that the best approach would be to encourage licensees to include their fire protection program commitments (including certain of current fire protection technical specifications) into an FSAR update and adopt a standard license condition requiring adherence to the FSAR but providing flexibility for making changes under 50.59. This approach would make the fire protection commitments-enforceable, yet lessen the number of technical specification requirements.

A revision of Enclosure 3 to SECY-85-306, the proposed Generic Letter on Fire Protection, which would implement this approach is enclosed. Changes, in comparative text, are contained only in Section F.

The standard license condition has been modified somewhat from that provided in SECY-85-306. The condition enclosed would allow changes to be made within the ambit of 50.59, but would

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49-28177

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require a license amendment where the proposed change to the approved program would adversely affect the ability to achieve and maintain safe shutdown in the event of a fire. This requirement ensures that all facilities will be held to the level of protection required by Appendix R unless the Commission specifically allows otherwise after prior review.


 William J. Dircks
 Executive Director for Operations

Enclosures:

1. Revision to Enclosure 3,
 SECY-85-306
2. Revision to Enclosure 6,
 SECY 85-306

Commissioners' comments or consent should be provided directly to the Office of the Secretary along with their votes on SECY-85-306 and by c.o.b. Monday, January 13, 1986.

Commission Staff Office comments, if any, should be submitted to the Commissioners NLT Monday, January 6, 1986, with an information copy to the Office of the Secretary. If the paper is of such a nature that it requires additional time for analytical review and comment, the Commissioners and the Secretariat should be apprised of when comments may be expected.

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GENERIC LETTER ON FIRE PROTECTION

TO ALL LICENSEES AND APPLICANTS FOR OPERATING LICENSES

Gentlemen:

SUBJECT: IMPLEMENTATION OF FIRE PROTECTION REQUIREMENTS

In the Spring of 1984, the Commission held a series of Regional Workshops on the implementation of NRC fire protection requirements at nuclear power plants. At those workshops, a package of ~~recently developed~~ NRC guidance was distributed to each attendee which included NRC staff responses to industry questions and a document titled "Interpretations of Appendix R." The cover memo for the package explained that it was a draft package which would be issued in final form via Generic Letter following the workshops.

The guidance approved by the Commission is appended to this letter, and is in the same format as the draft package, i.e., "Interpretations of Appendix R" and responses have been modified from the draft package, and a number of industry questions raised at or subsequent to the workshops have been added and answered. This package represents recent staff assessment of these questions and provides guidance as to acceptable methods of satisfying Commission regulatory requirements. Other methods proposed by licensees for complying with Commission regulations may also be satisfactory and will be considered on their own merits. To the extent that this guidance may be inconsistent with prior guidance (including Generic Letter 83-33), it is intended that the current letter takes precedence.

Review to staff to discuss to licensees

be more specific about what the changes actually are - don't let it read like I am

If you have any questions, you should contact the NRC Project Manager for your facility.

In the lettered sections below, some additional topics are covered which also bear on the interpretation and implementation of NRC fire protection requirements. The topics are: (A) schedular exemptions, (B) revised inspection program, (C) documentation required to demonstrate compliance, (D) quality assurance requirements applicable to fire protection systems, and (E) notification of the NRC when deficiencies are discovered.

are they

A. Schedular Exemptions

The Appendix R implementation schedule was established by the Commission in 10 CFR 50.48(c), promulgated together with Appendix R in November of 1980. Allowing time to evaluate the need for alternative or dedicated shutdown systems, which require prior NRC approval before installation, and time for design of and NRC review of such systems, the Commission envisioned that implementation of Appendix R would be complete in four to five years, or approximately by the end of 1985. Many schedule extensions were granted by the staff under the "tolling provision," 50.48(c)(6), and under 10 CFR 50.12, the longest of which now extends into 1987. Some licensees have proceeded expeditiously to implement Appendix R and are now finished or nearly finished with that effort. Others have engaged in lengthy negotiations with the staff while continuing to file requests for schedule extensions, and thereby have barely begun Appendix R modifications needed to comply with Sections III.G

and III.L. Schedule extension requests have been received seeking implementation dates of 1990 or beyond.

As the 50.48(c) schedule was intended to be a one-time schedule commencing in the 1980-1982 time frame and ending in the 1985 time frame, extensions well beyond this schedule (particularly where major modifications remain to be completed) undermine the purpose of the schedule, which was to achieve expeditious compliance with NRC fire protection requirements. For that reason, additional schedular exemptions may be requested under 10 CFR 50.12, but such requests will be granted sparingly based on the following criteria:

1. The utility has, since the promulgation of Appendix R in 1980, proceeded expeditiously to meet the Commission's requirements.
2. The delay is caused by circumstances beyond the utility's control.
3. The proposed schedule for completion represents a best effort under the circumstances.

4. Adequate interim compensatory measures, *such as continuous fire watches and emergency procedures*, will be taken until compliance is achieved.

The NRC is currently reviewing all dockets of plants covered by the 50.48 schedule to determine schedule deadlines. When this review is completed, each licensee will be informed of the deadlines.

B. Revised Inspection Program

In 1982, the NRC developed an inspection program to verify compliance with the requirements of 10CFR50, Appendix R. This program was primarily oriented towards reviewing safe shutdown features of those pre-1979 licensees that had completed Appendix R modifications and selected NTOL plants. From 1982 to the present, a number of Appendix R compliance inspections have been performed. In many of the initial inspections it was found that licensees had made significant errors in implementing a number of Appendix R requirements.

The NRC will continue to conduct inspection of fire protection features. In the case of completed modifications, the inspection team will review compliance with applicable requirements. In the case of incomplete modification, the inspection team will review licensee approach to compliance, plans and schedules for completing such modifications. The NRC will attempt to review implementation of fire protection features on a schedule that will minimize the chances of licensees implementing features in a manner that does not meet with staff approval. Additionally, requests for this review and/or inspection by licensees will be granted within NRC resource constraints.

revise to reflect what is being done

Suggest IE confirm that this section is still correct. If not, revise accordingly.

C. Documentation Required to Demonstrate Compliance

The "Interpretations" document attached to this letter states that, where the licensee chooses not to seek prior NRC review and approval of, for example, a fire area boundary, an evaluation must be performed by a fire protection engineer (assisted by others as needed) and retained for future NRC audit. Evaluations of this type must be written and organized to facilitate review by a person not involved in the evaluation. Guidelines for what such an evaluation should contain may be found in: (1) Section B of Appendix R and (2) Section C.1.b of Branch Technical Position (BTP) CMEB 9.5-1 Rev. 2 dated July 1981. All calculations supporting the evaluation should be available and all assumptions clearly stated at the outset. The NRC intends to initiate enforcement action where, for a given fire area, compliance with Appendix R is not readily demonstrable and the licensee does not have available a written fire hazard analysis for the area. The term "readily demonstrable" includes situations where compliance is apparent by observation of the potential fire hazard and the existing protective features.

D. Quality Assurance Requirements Applicable

For fire protection systems the licensee should have and maintain a quality assurance program that provides assurance that the fire protection systems will be designed, fabricated, erected, tested, maintained and operated so that they will function as intended. Fire protection systems are not "safety-related" and are therefore not within the scope of Appendix B to 10 CFR Part 50, unless the licensee has committed to include these systems under the Appendix B program for the plant. NRC guidance for an acceptable quality assurance program for fire protection systems, given in Section C.4 of Branch Technical Position CMEB 9.5-1 Rev. 2 dated July 1981, has generally been used in the review and acceptance of approved fire protection programs - for plants licensed after January 1, 1979. For plants licensed prior to January 1, 1979, similar guidance was referenced in footnotes 3 and 4 to 10 CFR 50.48. They are contained in BTP APCS 9.5-1 and Appendix A thereto and in "Nuclear Plant Fire Protection Functional Responsibilities, Administrative Control and Quality Assurance" dated June 14, 1977.

E. Notification of the NRC When Deficiencies are Discovered

Licensees are reminded of their obligation to notify the NRC of fire protection deficiencies which meet the criteria of 10 CFR 50.72 or 10 CFR 50.73 as applicable.

F. Addition of Fire Protection Program into FSAR

Most licenses contain ^{conditions} a section on fire protection. License conditions for plants licensed prior to January 1, 1979, contain a condition requiring implementation of modifications committed to by the licensee as a result of the BTP review. These license conditions were added by amendments issued between 1977 and February 17, 1981, the effective date of 10 CFR 50.48 and Appendix R.

*that we
are talking
all the
licensees?
Support
deleted?
not
necessary.*

Two points should be noted in regard to these conditions: (1) they did not explicitly cover required fire protection features where modifications to the existing plant configuration or procedures were not required, and (2) some of the provisions in these conditions may have been superseded by Sections III.G, J, O, and L of Appendix R.

License conditions for plants licensed after January 1, 1979 vary widely in scope and content. Some only list open items that must be resolved by a specified date or event, such as exceeding five percent power or the first refueling outage. Some reference a commitment to meet Appendix R; some reference the FSAR and/or the NRC staff's SER. These variations have created problems for licensees and for NRC inspectors in identifying the operative and enforceable fire protection requirements at each facility.

These license conditions also create difficulties because they do not specify when a licensee may make changes to the approved program without requesting a license amendment. If the fire protection program committed to by the licensee is required by a specific license condition or is not part of the FSAR for the facility, the provisions of 10 CFR 50.59 may not be applied to make changes without prior NRC approval. Thus licensees may be required to submit amendment requests even for relatively minor changes to the fire protection program.

The aforementioned problems, in general, exist because of the many submittals that constitute the fire protection program for each plant. The Commission believes that the best way to resolve these problems is to incorporate the fire protection program, including the fire hazards analysis and the fire protection Technical Specifications, into the Final Safety Analysis Report (FSAR) for the facility. In this manner, the fire protection program, including the systems, the administrative and technical controls, the organization, and other plant features associated with fire protection would be on a consistent status with other plant features described in the FSAR. Also, the provisions of 10 CFR 50.59 would then apply directly for changes the licensee desires to make in the fire protection program that would not adversely affect the ability to achieve and maintain safe shutdown. In this context, the determination of the involvement of an unreviewed safety question defined in §50.59(a)(2) would be made based on the "accident....previously evaluated" being the postulated fire in the fire hazards analysis for the fire area affected by the change. The Commission also believes that a standard license condition, requiring licensees to comply with the provisions of the fire protection program as described in the FSAR, should be used to ensure uniform enforcement of fire protection requirements.

Therefore, each licensee should include, in the FSAR update required by 10 CFR 50.71(e) that will fall due more than 6 months after the date of this letter, the incorporation of the fire protection program that has been approved by the NRC, including the fire hazards analysis that forms the basis for the fire protection program, and the fire protection Technical Specifications. This incorporation may be by reference to specific previous submittals and the NRC approvals where appropriate. Upon completion of this effort, including the certification required by 10 CFR 50.71(e)(2), the licensee may apply for an

*all of us
work
up
most current FSAR
- admin.
procedures?*

*bring the components of fire
protection program previously approved
to that area attached to the change.*

2

need to confirm that provisions affected by the licensee incorporation of the fire protection program in the FSAR? Given that a licensee may change the program

amendment to the operating license which [deletes] amends [the present] any current license conditions regarding [the] fire protection [program] and [completed fire protection features. Inclusion of the fire protection program in the FSAR will be a prerequisite for licensing for all applications now under review. No license condition would then be required.] substitutes the following standard condition:

1. The licensee shall implement and maintain in effect all provisions of the approved fire protection program as described in the Final Safety Analysis Report for the facility (or as described in submittals dated -----) and as approved in the SER dated ----- (and Supplements dated -----) subject to the following provision.
2. The licensee may not make changes to the approved fire protection program which would adversely affect the ability to achieve and maintain safe shutdown in the event of a fire without prior approval of the Commission.

The licensee may alter specific features of the approved program provided (a) such changes do not otherwise involve a change in a license condition or technical specification or result in an unreviewed safety question (see 10 CFR 50.59), and (b) such changes do not result in failure to complete the fire protection program as approved by the Commission. As with other changes implemented under 10 CFR 50.59, the licensee shall maintain, in auditable form, a current record of all such changes, including an analysis of the effects of the change on the fire protection program, and shall make such records available to NRC inspectors upon request. All changes to the approved program shall be reported annually to the Director of the Office of Nuclear Reactor Regulation, along with the FSAR revisions required by 10 CFR 50.71(e).

Temporary changes to specific fire protection features which may be necessary to accomplish maintenance or modifications are acceptable provided interim compensatory measures are implemented.

At the same time, the licensee may request an amendment to delete the technical specifications that will now be unnecessary. If licensees fail to request amendments to their licenses to add this condition, the Commission will consider whether such changes should be required by order or by rule.

Inclusion of the fire protection program in the FSAR will be a prerequisite for licensing for all applications now under review. The standard license condition will be included in new licenses.

Suppose a licensee chooses not to follow this G.I.'s guidance. How do we deal with them? Some plants may have virtually no T.S. or a very flimsy license

of the license

Enclosure 6

FIRE PROTECTION LICENSE CONDITION

1. The licensee shall implement and maintain in effect all provisions of the approved fire protection program as described in the Final Safety Analysis Report for the facility (or as described in submittals dated ----- and as approved in the SER dated ----- (and Supplements dated -----) subject to the following provision.

2. The licensee may not make changes to the approved fire protection program which would adversely affect the ability to achieve and maintain safe shutdown in the event of a fire without prior approval of the Commission.