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68513: 125-132

UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D. C. 20555

August 11, 1986

MEMORANDUM FOR: Those on Attached List

THRU: Phillip F. McKee, Chief
Operating Reactor Programs Branch
Division of Inspection Programs
Office of Inspection and Enforcement

FROM: Leon E. Whitney, Lead Contact for Fire Protection
Operating Reactor Programs Branch
Division of Inspection Programs
Office of Inspection and Enforcement

SUBJECT: MINUTES OF MAY 7, 1986 MEETING TO DISCUSS THE EFFECT OF SECY-85-306, APPENDIX R, POST-FIRE SAFE SHUTDOWN

Enclosed please find an agenda, a list of attendees, and meeting minutes for the May 7, 1986 meeting in Bethesda, Maryland, to discuss the effect of SECY-85-306.

Contrary to a decision made during the meeting, SAFFIRE viewgraphs are not enclosed. Current SAFFIRE work is being closed out by NRR and RES. Future SAFFIRE use within the NRC is planned only in connection with the LaSalle PRA. Enhancements useful in support of the inspection process (such as secondary ignition) are not currently identified for funding. DI will monitor inspection results to determine if a need develops for a SAFFIRE type computer code to assist in a review of licensee analyses.

The active and thoughtful participation of those in attendance made this a productive and useful meeting.

Leon E. Whitney, Lead Contact for Fire Protection
Operating Reactor Programs Branch
Division of Inspection Programs
Office of Inspection and Enforcement

Enclosures:
As stated

Contact: Leon Whitney, IE
(49-29668)

Addresses for Memorandum dated 8/11/86

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Enclosure 1

Meeting on SECY-85-306, Appendix R, Post-Fire Safe Shutdown

May 7, 1986

Bethesda, Maryland

Agenda

Time	Function/Topic	Speaker/Discussion Leader
9:00	Introduction	L. Whitney, ORPB
9:30	SECY-85-306 and Resultant Staff Requirements	L. Whitney, ORPB
11:30	Enforcement Policy	T. Poindexter, IE
12:00	Lunch	
1:00	Generic Letter 86-10	J. Stang, NRR
1:30	SAFFIRE	L. Whitney, ORPB
2:00	Discussion of SECY-85-306	R. Vollmer, DD:IE
3:00	Safe Shutdown Specialist Statement of Work	L. Whitney, ORPB
3:30	Upcoming Conceptual Review, Inspection at Brown's Ferry 1/2/3	L. Whitney, ORPB
4:00	ADJOURN	

Enclosure 2

SECY-85-306 Meeting

May 7, 1986

Minutes

The purpose of the meeting was to discuss the effect of SECY-85-306 on Appendix R, post-fire Safe Shutdown inspections.

Some points raised during the discussions were:

- o Whether Generic Letter 86-10 applies to post-79 licensees.
  - Note that Generic Letter 86-10 was addressed to all power reactor licensees.
  - Generic Letter 86-10 applies to post-79 licensees except where superseded by specific commitments or agreements that have been documented during the licensing process.
- o It was noted that the second paragraph of Generic Letter 86-10 stated that the included "Questions and Answers" provided guidance as to acceptable methods of satisfying Commission regulatory requirements, but that other methods would be considered on their own merits.
- o It was noted that the second paragraph of Generic Letter 86-10 stated that Generic Letter 83-33 is superseded by Generic Letter 86-10 where conflict exists.
- o It was noted that Question and Answer 3.1.1 indicates that fire barriers established under the BTP process need not necessarily be reanalyzed as a result of the approval of SECY-85-306.
- o It was stated that in fire areas for which alternative safe shutdown has not been provided, an exemption for Section III.G.2. of Appendix R is required if the separation features of Section III.G.2 are not provided. This statement was challenged with the line of reasoning that if Section III.G.1.a. of Appendix R is satisfied, Section III.G.2 need not be satisfied.

GL 86-10

  - ELD provided the following resolution to this question: Interpretation Three of ~~Appendix R~~ (which defines the term "free of fire damage" in Section III.G.1.a) was provided to clarify Section III.G.1.a., during the exemption process, for licensees attempting to justify the lack of III.G.2. separation features for redundant trains within a single fire area. It was never intended that "other methods proposed by licensees" would be reviewed and approved at the Appendix R validation inspection.

Office of the Executive Legal Director → now OGC

For any fire area an approved exemption is required where neither alternative safe shutdown nor the separation features of Section III.G.2. are provided.

- o It was noted that the three assumptions of Question and Answer 5.3.10 are meant for independent use (that is, only one assumption applies for any given configuration in a reactor plant). These assumptions are therefore consistent with the established NRR review practice of requiring licensees to analyze for any and all spurious actuations or failures where no two such spurious actuations or failures occur simultaneously.

- o Some attendees expressed concern over approved BWR ADS/LPCI post-fire safe shutdown configurations. Attendees were assured that fuel rod tests had been performed to assess the potential for core damage arising from short term partial core uncovery. DI contacted RES and developed the following information:

  - Dr. Robert Van Houten of the Fuel Systems Research Branch of the Division of Accident Evaluation, Office of Nuclear Regulatory Research (427-4463) is an authority in this area. He states that fuel rod testing has been conducted for many years at the National Reactor Universal at the Chalk River (U.S.) National Laboratory in Chalk River, Canada. Up to 32 bundled light water reactor fuel rods have been tested for short time periods in partial steam cooling mode with simulated 100% power history decay heat. The cladding partially oxidized but no fuel damage resulted.

  - Various NUREGs (PNL, TH or MT series, Mohr or Freshly as authors) are available on this topic, as well as NUREG 0516 on dryout.

- o During the meeting DI indicated that TI-2515/62 was to be revised to incorporate information from SECY-85-306. Additionally, DI will address whether a separate instruction or inspection procedure is needed to cover the inspection of facilities which have not received their full-power operating license.