Issue 181: Fire Protection (Rev. 2)

DESCRIPTION

In February 1993, The U.S. Nuclear Regulatory Commission (NRC) Office of Nuclear Reactor Regulation (NRR) completed a reassessment of the reactor fire protection review and inspection programs, in response

to programmatic concerns raised during the review of Thermo-Lag fire barriers, and prepared a report.[1] A fire protection task action plan (FP-TAP) was then prepared to implement the recommendations that resulted from this reassessment. The FP-TAP includes a wide range of technical and programmatic fire protection issues, including recommendations for action (Part I), recommendations for further study (Part II), confirmation issues (Part III), and lessons learned (Part IV). Staff actions to address the recommendations were submitted to the Commission in SECY-93-143, "NRC Staff Actions To Address the Recommendations in the Report on

the Reassessment of the NRC Fire Protection Program," dated May 21, 1993,[2] and progress reports[3,

4] were issued. This issue was identified in an NRR memorandum[5] to the Office of Nuclear Regulatory Research in February 1996.

Each operating reactor has an NRC-approved fire protection plan that, if properly implemented and maintained, satisfies Title 10 of the Code of Federal Regulations (10 CFR) 50.48, "Fire Protection," and General Design Criterion 3, "Fire Protection," of Appendix A, "General Design Criteria for Nuclear Power Plants," to 10 CFR Part 50, "Domestic Licensing of Production and Utilization Facilities." The staff's focus was on developing

the framework for the future direction of the NRC fire protection program, with emphasis on a fire protection functional inspection (FPFI) program, a plan for developing and implementing this program, and a plan for centralized management, by NRR, of the FPFI program and all other reactor fire protection work. The principal objective of these efforts was to ensure that the NRC has a strong, broad-based, and coherent fire protection program that is commensurate with the issue's safety significance.

CONCLUSION

The staff developed the FPFI program inspection procedures and guidance and drafted recommendations for centrally managing all reactor fire protection reviews and inspections, using Headquarters and regional staff qualified to perform such work. With contract assistance from Brookhaven National Laboratory, the staff continued to develop a probabilistic risk assessment model for the self-induced station blackout study.

Brookhaven National Laboratory also drafted a report on risk-based approaches for evaluating fire mitigation features in nuclear power plants. Thus, this issue addressed the staff's efforts to improve its capability to make

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[1] Memorandum for A. Thadani from G. Holahan, "Revision to Report on the Re-Assessment of the NRC Fire Protection Program," February 27, 1993. [9504190319]
[2] SECY-93-143, "NRC Staff Actions to Address the Recommendations in the Report on the Reassessment of the NRC Fire Protection Program," U.S. Nuclear Regulatory Commission, May 21, 1993. [9306030231]
[3] SECY-95-034, "Status of Recommendations Resulting from the Reassessment of the NRC Fire Protection Program," U.S. Nuclear Regulatory Commission, February 13, 1995. [9503060019]
[4] Memorandum for Chairman Jackson et al. from J. Taylor, "Semiannual Report on the Status of the Thermo-Lag Action Plan and Fire Protection Task Action Plan," September 20, 1995. [9509250375]
[5] Memorandum for C. Serpan from A. Chaffee, "Nuclear Reactor Regulation (NRR) Input Into Research NUREG-0933 (WITS Item 9400213)," February 13, 1996. [9602260124]

independent assessments of safety and, therefore, was considered to be a licensing issue.[6] As a part of the improvements to NUREG-0933, the NRC staff clarified in SECY-11-0101, "Summary of Activities Related to Generic Issues Program," dated July 26, 2011,[7] that the Generic Issues Program will not pursue any further actions toward resolution of licensing and regulatory impact issues. Because licensing and regulatory impact issues are not safety issues by the classification guidance in the legacy Generic Issues Program, these issues do not meet at least one of the Generic Issues Program screening criteria and do not warrant further processing in accordance with Management Directive 6.4, "Generic Issues Program," dated November 17,

2009.[8] Therefore, this issue will not be pursued any further in the Generic Issues Program.

[6] Memorandum for W. Russell from D. Morrison, "Prioritization of the NRR Action Plans Submitted to RES on February 13, 1996," June 24, 1996. [9606260260]
[7] SECY-11-0101, "Summary of Activities Related to Generic Issues Program," July 26, 2011. [ML111590814]
[8] Management Directive 6.4, "Generic Issues Program," U.S. Nuclear Regulatory Commission, November 17, 2009.