# Fire Protection & 10 CFR 50, Appendix R Reference Document Library

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### Federal Register/Code of Federal Regulations

- 45 FR 76602-76616, November 19, 1980, 10 CFR 50, Fire Protection Program for Operating Nuclear Power Plants
- 46 FR 44734-44735, September 8, 1981, 10 CFR 50, Fire Protection Rule; Corrections
- 64 FR 53582-53617, October 4, 1999, 10 CFR 50.59 and 10 CFR 72.48, Changes, Tests, and Experiments; related sections; Final Rule
- 10 CFR 50.7, Employee Protection
- 10 CFR 50.12, Specific Exemptions
- 10 CFR 50.48, Fire Protection
- 10 CFR 50.59, Changes, Tests, and Experiments, 1/1/99
- 10 CFR 50.59, Changes, Tests, and Experiments, Final Rule Pending, 10/4/99
- 10 CFR 50.71, Maintenance of Records, Making of Reports
- 10 CFR 50.72, Immediate Notification Requirements for Operating Nuclear Power Reactors
- 10 CFR 50.109, Backfitting
- 10 CFR 50, Appendix A, General Design Criteria for Nuclear Power Plants GDC 3, Fire Protection
- 10 CFR 50, Appendix R, Fire Protection for Nuclear Power Facilities Operating Prior to January 1, 1979

### **NRC Generic Letters**

- 81-12, Fire Protection Rule, February 20, 1981
- 81-12, Clarification 1; Fire Protection Rule Appendix R, Roger J. Mattson to Darrell G. Eisenhut, March 22, 1982
- 81-21, Natural Circulation Cooldown, May 5, 1981
- 82-21, Technical Specifications for Fire Protection Audits, October 6, 1982
- 83-33, NRC Positions on Certain Requirements of Appendix R to 10 CFR 50, October 19, 1983
- 85-01, Fire Protection Policy Steering Committee Report, January 9, 1985
- 85-09, Technical Specifications for Generic Letter 83-28, Item 4.3, May 23, 1985
- 86-10, Implementation of Fire Protection Requirements, April 24, 1986
- 86-10, Supplement 1, Fire Endurance Test Acceptance Criteria for Fire Barrier Systems Used to Separate Redundant Safe Shutdown Trains Within the Same Fire Area, March 25, 1994
- 88-12, Removal of Fire Protection Requirements From Technical Specifications, August 2, 1988
- 88-20, Individual Plant Examination for Severe Accident Vulnerabilities 10 CFR 50.54(f), November 23, 1988
- 89-13, Service Water System Problems Affecting Safety-Related Equipment, July 18, 1989

### NRC Generic Letters (continued)

- 91-18, Information to Licensees Regarding Two NRC Inspection Manual Sections On Resolution of Degraded and Nonconforming Conditions and On Operability, November 7, 1991
- 91-18, Revision 1, Information to Licensees Regarding NRC Inspection Manual Section On Resolution of Degraded and Nonconforming Conditions, October 18, 1997
- 92-08, Thermo-Lag 330-1 Fire Barriers, December 7, 1992
- 93-03, Verification of Plant Records, October 20, 1995
- 93-06, Research Results On Generic Safety Issue 106, "Piping and the Use of Highly Combustible Gases In Vital Areas," October 25, 1993
- 95-01, NRC Staff Technical Position on Fire Protection for Fuel Cycle Facilities, January 26, 1995

### **Regulatory Guides**

- DG-1097 (Draft), Fire Protection for Operating Nuclear Power Plants. June 2000
- 1.32, Criteria for Safety-Related Electric Power Systems for Nuclear Power Plants, Rev. 2, February 1977
- 1.39, Housekeeping Requirements for Water-Cooled Nuclear Power Plants, Rev. 2, September 1977
- 1.52, Design, Testing, and Maintenance Criteria for Post-Accident Engineered Safety Feature Atmosphere Cleanup System Air Filtration and Adsorption Units of Light-Water-Cooled Nuclear Power Plants, Rev. 2, March 1978

- 1.75, Physical Independence of Electric Systems, Rev. 2, September 1978
- 1.101, Emergency Planning and Preparedness for Nuclear Power Reactors, Rev. 3, August 1992
- 1.174, An Approach for Using Probabilistic Risk Assessment In Risk-Informed Decisions On Plant-Specific Changes to the Licensing Basis, July 1998
- 1.189, Fire Protection for Operating Nuclear Power Plants, April 2001
- 1.191, Fire Protection for Nuclear Power Plants During Decommissioning and Permanent Shutdown, May 2001
- Safety Guide 6, Independence Between Redundant Standby (Onsite) Power Sources and Between Their Distribution Systems

#### **NRC Branch Technical Positions**

- Branch Technical Position APCSB 9.5-1, Guidelines for Fire Protection for Nuclear Power Plants, Rev. 1, May 1, 1976
- Appendix A to Branch Technical Position APCSB 9.5-1, Guidelines for Fire Protection for Nuclear Power Plants, August 23, 1976
- Branch Technical Position CMEB 9.5-1, Guidelines for Fire Protection for Nuclear Power Plants, Rev. 2

#### **NUREGs**

- NUREG-75/087, Standard Review Plan, Section 9.5.1, Fire Protection Program, Rev. 1, May 1, 1976
- NUREG-75/087, Standard Review Plan, Section 9.5.1, Fire Protection Program, Rev. 2
- NUREG-0800, Standard Review Plan, Section 9.5.1, Fire Protection Program, Rev. 3, July 1981
- NUREG-1022, Rev. 1, Event Reporting Guidelines: 10 CFR 50.72 and 50.73, January 1998
- NUREG-1022, Rev. 2, Event Reporting Guidelines: 10 CFR 50.72 and 50.73, October 2000
- NUREG-1521, Technical Review of Risk-Informed, Performance-Based Methods for Nuclear Power Plant Fire Protection Analyses, July 1998

### **SECY Letters**

- 83-269, Fire Protection Rule for Future Plants (SECY 82-267), July 5, 1983
- 97-127, Development of a Risk-Informed, Performance-Based Regulation for Fire Protection at Nuclear Power Plants, June 19, 1997
- 98-058, Staff Requirements: SECY 98-058 Development of a Risk-Informed, Performance-Based Regulation for Fire Protection at Nuclear Power Plants, June 30, 1998
- 98-187, Interim Status Report -- Fire Protection Functional Inspection Program, August 3, 1998
- 99-140, Recommendation for Reactor Fire Protection Inspections (WITS Item 199700021), May 20, 1999
  Attachment 1, Fire Risk Fact Sheet (not dated)

- Attachment 2, Fire Protection Functional Inspection Pilot Program: Final Report, April 1999
- 99-182, Assessment of the Impact of Appendix R Fire Protection Exemptions On Fire Risk, July 9, 1999 99-204, Kaowool and FP-60 Fire Barriers, August 4, 1999

### **NRC Memos**

- Nuclear Plant Fire Protection Functional Responsibilities, Administrative Controls and Quality Assurance, R. Ferguson & P. Matthews To D. Eisenhut, et al., June 20, 1977
- Fire Protection Rule Appendix R, Roger J. Mattson to Darrell G. Eisenhut, March 22, 1982
- [Potential Control Room Fires], Harold R. Denton to S. A. Bernson, April 20, 1982
- Position Statement on Allowable Repairs for Alternative Shutdown and on the Appendix R Requirement for Time Required to Achieve Cold Shutdown, Roger J. Mattson to Richard M. Vollmer, July 2, 1982
- Use of the Automatic Depressurization System (ADS) and Low Pressure Coolant Injection (LPCI) to Meet Appendix R, Alternate Shutdown Goals;
  - L. S. Rubenstein to Roger J. Mattson, December 3, 1982

#### NRC Memos (continued)

- Statement of Staff Position Regarding Source Range Flux, Reactor Coolant Temperature, and Steam Generator Pressure Indication to Meet Appendix R, Alternate Shutdown Capability, L. S. Rubenstein to Roger J. Mattson, January 7, 1983
- Oil Collection System Reactor Coolant Pumps, Florida Power and Light Company St. Lucie 2 - Docket No. 50-389 from J. Olshinski to D. Eisenhut, April 1, 1983
- Recommended Fire Protection Policy and Program Actions; Fire Protection Policy Steering Committee to William J. Dircks, October 26, 1984
  - Enclosure 1, William J. Dircks to Harold R. Denton, et al., Review of NRC Fire Protection Policy and Programs, September 13, 1984
  - Enclosure 2, Generic Letter on Fire Protection Enclosure 3, Interpretations of Appendix R
  - Enclosure 4, Guidance for Enforcement Actions Concerning Fire Protection Requirements
  - Enclosure 5, Fire Protection License Condition Enclosure 6, Appendix R Questions and Answers
- Draft Fire Protection Functional Inspection (FPFI)
  Procedure; David L. Wigginton to John R. McGaha, Jr.,
  June 5, 1997
- Enforcement Guidance Memorandum Disposition of Violations of Appendix R, Sections IIIG and III.L Regarding Circuit Failures; James Lieberman to Hubert J. Miller, et al., March 2, 1998

- Summary of NRC Fire Protection Inspection Workshop Held on November 10, 1998; Ledyard B. Marsh to Gary M. Holahan, December 24, 1998
- NRC Regulatory Issue Summary 99-02, Relaxation of Technical Specification Requirements for PORC Review of Fire Protection Program Changes, October 13, 1999
- Response to Task Force Interface Agreement (TIA 2001-003) Regarding Fire Protection Compensatory Measures at Millstone Nuclear Power Station, Unit No. 3 (TAC No. MB1606, Ledyard B. Marsh to A. Randolph Blough, October 16, 2001

#### **NRC Bulletins**

- 77-08, Assurance of Safety and Safeguards During an Emergency Locking Systems, December 28, 1977
- 81-03, Flow Blockage of Cooling Water to Safety System Components by Corbicula Sp. (Asiatic Clam) and Mytilus Sp. (Mussel), April 10, 1981
- 92-01, Supplement 1, Failure of Thermo-Lag 330 Fire Barrier System to Perform Its Specified Fire Endurance Function, August 28, 1992

#### **NRC Information Notices**

- 83-41, Actuation of Fire Suppression System Causing Inoperability of Safety-Related Equipment, June 22, 1983
- 83-69, Improperly Installed Fire Dampers at Nuclear Power Plants, October 21, 1983

#### NRC Information Notices (continued)

- 83-83, Use of Portable Radio Transmitters Inside Nuclear Power Plants, December 19, 1983
- 84-09, Lessons Learned From NRC Inspections of Fire Protection Safe Shutdown Systems (10 CFR 50, Appendix R), February 13, 1984
- 84-09, Revision 1, Lessons Learned From NRC Inspections of Fire Protection Safe Shutdown Systems (10 CFR 50, Appendix R), March 7, 1984
- 84-16, Failure of Automatic Sprinkler System Valves to Operate, March 2, 1984
- 85-09, Isolation Transfer Switches and Post-Fire Shutdown Capability, January 31, 1985
- 86-35, Fire In Compressible Material at Dresden Unit 3, May 15, 1986
- 87-14, Actuation of Fire Suppression System Causing Inoperability of Safety-Related Ventilation Equipment, March 23, 1987
- 88-04, Inadequate Qualification and Documentation of Fire Barrier Penetration Seals, February 5, 1988
- 88-04, Supplement 1, Inadequate Qualification and Documentation of Fire Barrier Penetration Seals, August 9, 1988
- 88-23, Potential for Gas Binding of High-Pressure Safety Injection Pumps During a Loss-of-Coolant Accident, May 12, 1988
- 88-45, Problems In Protective Relay and Circuit Breaker Coordination, July 7, 1988

- 88-56, Potential Problems With Silicone Foam Fire Barrier Penetration Seals, August 4, 1988
- 89-52, Potential Fire Damper Operational Problems, June 8, 1989
- 91-17, Fire Safety of Temporary Installations or Services, March 11, 1991
- 91-47, Failure of Thermo-Lag Fire Barrier Material to Pass Fire Endurance Test, August 6, 1991
- 91-77, Shift Staffing at Nuclear Power Plants, November 6, 1991
- 91-79, Deficiencies In the Procedures for Installing Thermo-Lag Fire Barrier Materials, December 6, 1991
- 91-79, Supplement 1, Deficiencies Found In Thermo-Lag Fire Barrier Installation, August 4, 1994
- 92-18, Potential for Loss of Remote Shutdown Capability During a Control Room Fire, February 28, 1992
- 92-28, Inadequate Fire Suppression System Testing, April 8, 1992
- 92-46, Thermo-Lag Fire Barrier Material Special Review Team Final Report Findings, Current Fire Endurance Tests, and Ampacity, June 23, 1992
- 92-55, Current Fire Endurance Test Results for Thermo-Lag Fire Barrier Material, July 27, 1992
- 92-82, Results of Thermo-Lag 330-1 Combustibility Testing, December 15, 1992
- 93-33, Potential Deficiency of Certain Class 1E Instrumentation and Control Cables, April 28, 1993

### NRC Information Notices (continued)

- 93-40, Fire Endurance Test Results for Thermal Ceramics FP-60 Fire Barrier Material, May 26, 1993
- 93-41, One Hour Fire Endurance Test Results for Thermal Ceramics Kaowool, 3M Company FS-195 and 3M Company Interam E-50 Fire Barrier Systems, May 8, 1993
- 94-12, Insights Gained from Resolving Generic Issue 57: Effects of Fire Protection System Actuation on Safety-Related Equipment, February 9, 1994
- 94-22, Fire Endurance and Ampacity Derating Test Results for 3-Hour Fire-Rated Thermo-Lag 330-1 Fire Barriers, March 16, 1994
- 94-28, Potential Problems with Fire-Barrier Penetration Seals, April 5, 1994
- 94-34, Thermo-Lag 330-660 Flexi-Blanket Ampacity Derating Concerns, May 13, 1994
- 94-58, Reactor Coolant Pump Lube Oil Fire, August 16, 1994
- 94-86, Legal Actions Against Thermal Science, Inc., Manufacturer of Thermo-Lag, December 22, 1994
- 94-86, Supplement 1, Legal Actions Against Thermal Science, Inc., Manufacturer of Thermo-Lag, November 15, 1995
- 95-33, Switchgear Fire and Partial Loss of Offsite Power at Waterford Generating Station, Unit 3, August 23, 1995
- 95-36, Potential Problems with Post-fire Emergency Lighting, August 29, 1995

- 95-36, Supplement 1, Potential Problem with Post-fire Emergency Lighting, June 10, 1997
- 95-48, Results of Shift Staffing Study, October 10, 1995 95-49, Seismic Adequacy of Thermo-Lag Panels, October 27, 1995
- 95-49, Supplement 1, Seismic Adequacy of Thermo-Lag Panels, December 10, 1997
- 95-52, Fire Endurance Test Results for Electrical Raceway Fire Barrier Systems Constructed from 3M Company Interam Fire Barrier Materials, November 14, 1995
- 95-52, Supplement 1, Fire Endurance Test Results for Electrical Raceway Fire Barrier Systems Constructed from 3M Company Interam Fire Barrier Materials, March 17, 1998
- 97-01, Improper Electrical Grounding Results In Simultaneous Fires In the Control Room and the Safe-Shutdown Equipment Room, January 8, 1997
- 97-48, Inadequate or Inappropriate Interim Fire Protection Compensatory Measures, July 9, 1997
- 97-59, Fire Endurance Test Results of Versawrap Fire Barriers, August 1, 1997
- 97-70, Potential Problems with Fire Barrier Penetration Seals, September 19, 1997
- 97-73, Fire Hazard In the Use of a Leak Sealant, September 23, 1997

### NRC Information Notices (continued)

- 98-31, Fire Protection System Design Deficiencies and Common-Mode Flooding of Emergency Core Cooling System Rooms at Washington Nuclear Project Unit 2, August 18, 1998
- 99-05, Inadvertent Discharge of Carbon Dioxide Fire Protection System and Gas Migration, March 8, 1999
- 99-07, Failed Fire Protection Deluge Valves and Potential Testing Deficiencies In Preaction Sprinkler Systems, March 22, 1999
- 99-17, Problems Associated with Post-Fire Safe-Shutdown Circuit Analyses, June 3, 1999
- 99-28, Recall of Star Brand Fire Protection Sprinkler Heads, September 30, 1999
- 99-34, Potential Fire Hazard In the Use of Polyalphaolefin In Testing of Air Filters, December 28, 1999

### **Fire Protection Inspection Information**

- The Revised NRC Oversight Program, presentation slides, Alan L. Madison, NRR/NRC, undated
- Draft Fire Protection Functional Inspection (FPFI) Procedure, June 4, 1997
- Fire Protection Risk Significance Screening Methodology, presentation slides, PSAB/PSB, Region IV PRA Workshop, July 20, 1999
- Fire Protection Baseline Inspection Activities, Resident Inspector and Triennial Team Preparation, Coordination, and Onsite Inspection Activities, presentation slides, Leon Whitney, Plant Systems Branch, NRR, September 1999

- Fire Protection Baseline Inspection Procedure, Structure and Content, presentation slides, Leon Whitney, SPLB/DSSA/NRR, September 1999 (\*\*)
- Fire Protection Functional Inspection Pilot Program and New Baseline Inspection Program, presentation slides, Steven West, FPESPS/NRR/NRC, September 13, 1999
- IP 64100, Postfire Safe Shutdown, Emergency Lighting and Oil Collection at Operating and Near-Term Operating Reactor Facilities
- IP 64150, Triennial Postfire Safe Shutdown Capability Reverification
- IP 64704, Fire Protection Program, June 24, 1998
- IP 71111, Fire Protection Triennial Inspection Procedure, Attachment 71111.05, March 23, 2001
- IP 71152, Identification and Resolution of Problems, March 06, 2001
- NRC Inspection Manual, Chapter 0609, Significance Determination Process, February 27, 2001
  - Appendix F, Determining Potential Risk Significance Fire Protection and Post-Fire Safe Shutdown Inspection Findings, February 27, 2001
    - Attachment 1, Application of Fire Protection Risk-Significant Screening Methodology to Hypothetical Cases, February 27, 2001
    - Attachment 2, Additional Guidance for the Assessment of Findings Using Significance Determination Process Entry, February 27, 2001

### **NRC Triennial Fire Protection Inspections**

- ANO NRC Inspection Report 50-313/01-06; 50-368/01-06, July 2-6 and 9-13, 2001
- Beaver Valley NRC Inspection Report
- Braidwood NRC Inspection Report 50-456/00-06(DRS); 50-457/00-06(DRS), June 5 June 16, 2001
- Browns Ferry NRC Inspection Report 50-259/00-08, and 50-296-00-08, June 26-30, 2000
- Brunswick Notification of Conduct of a Triennial Fire Protection Baseline Inspection (NRC Inspection Report 50-325/01-06, and 50-324/01-06), February 22, 2001
- Brunswick NRC Inspection Report 50-325/01-06, and 50-324/01-06, May 7-11, 2001
- Byron NRC Inspection Report 50-454/01-12(DRS); 50-455/01-12(DRS), November 26-30, and December 10-14, 2001
- Callaway NRC Inspection Report 50-483/00-13, August 21-25, September 7-8, 2000
- Calvert Cliffs NRC Inspection Report 50-317/01-007, and 50-318/01-007. August 27 September 14, 2001
- Catawba NRC Inspection Report 50-413/01-08, and 50-414/01-08, August 6, 2001 September 20, 2001
- Clinton NRC Inspection Report 50-461/02-02(DRS), February 25 - March 1, 2002, and March 11-15, 2002
- Cooper NRC Inspection Report 50-298/01-03, April 6, 2001
- Diablo Canyon Fire Protection Triennial Baseline Inspection Report 50-275/00-03, and 50-323/00-03, April 3-7, 2000

- Fort Calhoun Letter from Dr. Dale A. Powers, NRC, to S. K. Gambhir, Omaha Public Power District, Notification of Conduct of a Triennial Fire Protection Baseline Inspection 50-285/00-01, December 3, 1999
- Fort Calhoun Fire Protection Triennial Baseline Inspection Report 50-285/00-01, January 24-28 and March 10, 2000
- Ginna NRC Fire Protection Inspection Report No. 05000244/2000-09, November 13-17, 2000
- Harris Fire Protection Inspection Report No. 50-400/99-13, November 1-5; November 8-December 20, 1999
- Hatch NRC Inspection Report Nos. 50-321/00-08, 50-366/00-08, August 20-25, 2000
- Hope Creek NRC Fire Protection Inspection Report No. 05000354/2001-002, January 16-26, 2001
- Indian Point Unit 2 NRC Fire Protection Inspection Report 05000247/2000-004, April 9-13, 2001
- Indian Point Unit 3 NRC Triennial Fire Protection Inspection Report 50-286/01-012, February 4-21, 2002
- Kewaunee NRC Inspection Report 50-305/01-04(DRP), January 1 - February 13, 2001
- LaSalle NRC Inspection Report 50-373/01-06(DRS); 50-374/01-06(DRS), June 11-22, 2001
- Limerick NRC Triennial Fire Protection Inspection Report 50-352/01-14, 50-353/01-14, December 10-21, 2001
- McGuire NRC Inspection Report 50-369/00-09, 50-370/00-09, October 30 November 3, 2000

## NRC Triennial Fire Protection Inspections (continued)

- Millstone 3 NRC Triennial Fire Protection Inspection Report No. 05000423/2001-12, October 15 -November 2, 2001
- North Anna Fire Protection Triennial Baseline Inspection (NRC Inspection Report Nos. 50-338/00-07, 50-339/00-07, April 24-28, 2000
- Nine Mile 1 NRC Fire Protection Inspection Report No. 05000220/2000-009, December 11-15, 2000
- Pallisades Triennial Fire Protection Baseline Inspection NRC Inspection Report 50-255/01-08(DRS) and Preliminary White Finding, July 9-13, 23-27, and August 17, 2001
- Peach Bottom NRC Fire Protection Inspection Report Nos. 05000277/2000-003 and 05000278/2000-003, April 24-28, 2000
- Point Beach NRC Inspection Report 50-266/01-12(DRS); 50-301/01-12(DRS), September 10-28, 2001
- Perry NRC Inspection Report 50-440/10(DRS), October 23 - November 2, 2000
- Pilgrim NRC Fire Protection Inspection Report No. 05000293/2000-004, August 14-18, 2000
- Prairie Island NRC Inspection Report No. 50-282/01-05(DRS); 50-306/01-05(DRS), April 23 May 11, 2001
- Palo Verde Triennial Fire Protection Baseline Inspection Report No. 50-528/2000-05; 50-529/2000-05; 50-530/2000-05, June 12-16, 2000

- Quad Cities Triennial Fire Protection Baseline Inspection Report No. 50-254/00-16(DRS); 50-265/00-16(DRS), December 4-15, 2000
- River Bend NRC Inspection Report 50-458/01-05, May 14-18, 2000
- Robinson NRC Inspection Report 50-261/01-08; November 26-30, 2001
- Salem NRC Inspection Report 05000272/1999010, 05000311/1999010; Final Significance Determination and Notice of Violation, November 15 -December 9 1999
- San Onofre NRC Triennial Fire Protection Inspection Report 50-361/01-15; 50-362/01-15, October 1-5, 2001
- Summer NRC Inspection Report 50-395/01-09, October 15- 19, 2001
- Turkey Point NRC Inspection Report 50-250/01-02, 50-251/01-02, February 5-9, 2001
- Vogtle NRC Inspection Report 50-424/01-04, 50-425/01-04, June 25-29, 2001
- Vermont Yankee NRC Inspection Report 05000271/2001-003, June 25-29, July 9-13, 2001
- Waterford NRC Inspection Report No. 50-382/00-07, September 25-29, October 26, 2000
- Watts Bar NRC Inspection Report 50-390/00-08, 50-391/00-08, December 4-8, 2000
- WNP-2 Triennial Fire Protection Baseline Inspection Report No. 50-397/00-07, May 1-5, 2000

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