

Delaying With Fire: Attachment 1
 Union of Concerned Scientists
 July 2006

Shearon Harris Fire Protection Abridged Chronology	
Date	Event
11/19/1980	The NRC published in the Federal Register a revised 10 CFR 50.48 and a new Appendix R to 10 CFR 50 regarding fire protection requirements for new and existing nuclear power plants, respectively. ⁱ
02/17/1981	The revised 10 CFR 50.48 and new Appendix R to 10 CFR 50 became effective. ⁱⁱ
02/20/1981	The NRC notified all power reactor licensees that the fire protection regulations in the revised 10 CFR 50.48 and new Appendix R to 10 CFR 50 are in force. ⁱⁱⁱ
07/1981	The NRC issued Revision 3 to Section 9.5.1, "Fire Protection Program," to NUREG-0800, the Standard Review Plan for nuclear power reactors. ^{iv}
04/24/1986	The NRC issued Generic Letter 86-10 to power reactor licensees to clarify the agency's expectations regarding fire protection requirements. ^v
02/04/1988	CP&L declared an emergency (Unusual Event) when the reactor auxiliary building supply fan motor S-3B was reported to be smoking. The electrical breaker for the fan was opened to de-energize the motor. ^{vi}
10/10/1989	CP&L declared an emergency (Alert level) at Harris due to a fire in the main generator and "B" main transformer. ^{vii}
04/28/1997	Workers called the Holly Springs fire department for assistance due to a fire in the A-SA battery room. The plant was in a refueling outage at the time. ^{viii}
08/18/1997	According to the NRC: <i>...the licensee [Carolina Power & Light Company] made changes to the approved fire protection program without prior Commission approval, that adversely affected the ability to achieve and maintain safe shutdown in event of a fire. In Safety Evaluation 97-255 the licensee accepted the condition of a degraded Thermo-Lag fire barrier assembly between the B Train Switchgear Room/ACP Room and the A Train CSR [Cable Spreading Room] in lieu of the intended 3-hour fire rating. ... The licensee went from full compliance with the fire protection safe shutdown system separation criteria to less than full compliance which increased the likelihood that both redundant divisions or trains of safety-related systems could be damaged by a single fire.^{ix}</i>
11/05/1999	The NRC performed a pilot fire protection inspection using a procedure revised for the new Reactor Oversight Process (ROP) and identified two violations: (1) fire resistance ratings and qualification testing of Thermo-Lag, and (2) Heymc [sic] one-hour and Promatec "MT" three-hour fire barrier systems not being qualified to meet safe shutdown separation requirements. Thermo-Lag was installed as a three-hour fire barrier between Switchgear Room B, Cable Spreading Room A, and Cable Spreading Room B. CP&L performed Thermo-Lag testing in 1994 and 1995 that demonstrated the Thermo-Lag fire barrier would function for only one hour and 48 minutes instead of three hours. CP&L performed an

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	<p>indicated a three hour fire severity loading existed in the area adjacent to the Thermo-Lag fire barriers and that no backup means of fire protection (e.g., automatic fire sprinklers) existed for the areas.</p> <p>Heymc [sic] and Promatec fire barrier wraps were applied for cables on redundant trains of safe shutdown related functions throughout the plant and both trains of the emergency diesel generators power cables routed through fire zone 4-A-CHLR. CP&L's fire barrier tests CTP-1026 for Heymc [sic] and CTP-1071 for Promatec "MT" indicated that the tests used the acceptance criteria of American Nuclear Insurers Bulletin No. 5 (1979) for fire barrier systems. The NRC inspection team discovered that the cover letters for each test report specifically stated the methodology was not considered an equivalent endurance qualification method for rating fire barriers.</p> <p>NRC Region II asked the NRC's Office of Nuclear Reactor Regulation to review these fire protection findings and determine if they constituted violations.^x</p>

ⁱ Letter dated November 24, 1980, from the Nuclear Regulatory Commission to all power reactor licensees.

ⁱⁱ Letter dated November 24, 1980, from the Nuclear Regulatory Commission to all power reactor licensees.

ⁱⁱⁱ Nuclear Regulatory Commission, Generic Letter 81-12, "Fire Protection Rule (45 FR 76602, November 19, 1980)," February 20, 1981.

^{iv} Nuclear Regulatory Commission, NUREG-0800, "Standard Review Plan," Section 9.5.1, "Fire Protection Program," Rev. 3, July 1981.

^v Nuclear Regulatory Commission, Generic Letter 86-10, "Implementation of Fire Protection Requirements," April 24, 1986.

^{vi} Nuclear Regulatory Commission, Daily Event Report No. 11414, February 4, 1988.

^{vii} Nuclear Regulatory Commission, Daily Event Report No. 16805, October 10, 1989.

^{viii} Nuclear Regulatory Commission, Daily Event Report No. 32233, April 28, 1997.

^{ix} Slides dated January 31, 2002, by Nuclear Regulatory Commission for pre-enforcement conference with Carolina Power & Light Company.

^x Memo dated November 23, 1999, from Loren R. Plisco, Director – Division of Reactor Projects, Nuclear Regulatory Commission, to John A. Zwolinski, Director – Division of Reactor Projects I/II, Nuclear Regulatory Commission, "Task Interface Agreement (TIA 99-028) Resolution of Harris Pilot Fire Protection Inspection Fire Barrier Qualification Issues."

**** See entire 16-page chronology at www.ncwarn.org