

From: Mark Salley *NRC*
To: Sunil Weerakkody *NRC*
Date: 7/17/03 11:21AM
Subject: Fwd: Re: Fire Protection Questions and Interpretations

Sunil,

Phil has asked me to jump-in here, so please let me provide some history/insights.

Appendix R, Section III.G.3 **Mandates** that fire detection & a fixed fire suppression system be installed in any area that forces the NPP to go to alternate/dedicated shutdown. Here is the logic:

Firstly, when you perform a Fire-Safe-Shutdown (FSSD) analysis (Appendix R), you start at the top & work down i.e., you try to meet III.G.1 have the redundant trains in separate fire areas. When/if that does not work, you progress to III.G.2, protect the train of concern that is in the opposite trains fire area with the accepted methods described in the Reg (3-hr barrier, or 1-hr w/ auto suppression & detection, or 20' combustible free separation w/ auto suppression & detection.) If you cannot meet .1 or .2 you must default to .3 Alternative/dedicated shutdown. which brings in III.L. This design decision was not meant to be made casually!!! .3 was put in the Regs for areas where you COULD NOT meet .1 or .2

.3 assumes that the NPP will be abandoning the Main Control Room (MCR) ~ this is where the large jump in risk comes in ~ every NPP is much safer shutting down & controlling the reactor from the MCR rather than w/ Alternative/dedicated shutdown which provides Minimum equipment & instrumentation, (often local) control. .3 was added because there are some fire areas where separation was virtually impossible, namely a fire in the MCR or cable spreading room. In the MCR, the NRC did not enforce the fixed suppression requirement because every MCR is manned 24/7, combustibles are controlled & a spurious fire suppression system could cause havoc to nuclear safety. Any other areas required the fixed suppression. This was done on the safety principle that the fire would be extinguished/controlled before the MCR had to be abandoned.

The point the licensee is making that the requirement for fixed suppression was left out of NUREG 0800 is juvenile at best. The NRC acknowledged this in Generic Letter 86-10, Question 8.11 & stated this deficiency (typo/oversight) would be corrected in the next rev of the BTP. We just have not revised the BTP for > 25 years. The "backfit" requirements of Appendix R were all relocated in NUREG 0800 (SRP) w/ the exception of this identified oversight.

I believe, Geary Mizuno (OGC) has been down this road before with us (was it Braidwood?). RII does not want to understand this (either by education or choice.) Geary, is this correct?

If any of the section members understand this requirement different than I, please correct me.

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