

SeabrookNPEM Resource

From: Plasse, Richard
Sent: Wednesday, March 02, 2011 4:45 PM
To: Cliche, Richard
Subject: FW: Seabrook LRA Fire Protection Follow-up RAI
Attachments: Seabrook LRA FP Followup RAI.docx

Draft RAI followup.

Hearing Identifier: Seabrook_License_Renewal_NonPublic
Email Number: 2218

Mail Envelope Properties (Richard.Plasse@nrc.gov20110302164400)

Subject: FW: Seabrook LRA Fire Protection Follow-up RAI
Sent Date: 3/2/2011 4:44:57 PM
Received Date: 3/2/2011 4:44:00 PM
From: Plasse, Richard

Created By: Richard.Plasse@nrc.gov

Recipients:
"Cliche, Richard" <Richard.Cliche@fpl.com>
Tracking Status: None

Post Office:

Files	Size	Date & Time
MESSAGE	26	3/2/2011 4:44:00 PM
Seabrook LRA FP Followup RAI.docx		18576

Options
Priority: Standard
Return Notification: No
Reply Requested: No
Sensitivity: Normal
Expiration Date:
Recipients Received:

RAI 2.3.3.15-1

Background

The LRA drawing PID-1-FP-LR20270 shows that sprinkler systems at locations C-4 to H-4 are out of scope (i.e., not colored in red).

In a letter dated December 3, 2010, NextEra Energy responded to RAI 2.3.3.15-1 by stating the sprinkler systems located on drawing PID- 1 -FP-LR20270, locations C-4 to H-4, are not in scope of License Renewal because they do not provide a function credited in Appendix R safe shutdown analysis and do not provide a pressure boundary function needed to support the Appendix R suppression systems.

Issue:

However, Seabrook Station UFSAR, Revision 13, Section 9.5.1.2(c)(7), "Manually Operated Pre-Action Pre-Action Sprinkler Systems," states that manually operated sprinkler systems are provided for areas containing the following: (a) turbine bearings, (b) lube oil piping from turbine bearings to guard.

Request:

The fire suppression systems in question discussed above appear to have been credited in the Seabrook Station approved fire protection program (UFSAR Section 9.5.1) for the fire suppression activities. Based on its review, the staff does not find the applicant's response to RAI 2.3.3.15-1 acceptable. The applicant explains that the fire protection systems in question are not credited to meet the requirements of Appendix R for achieving safe-shutdown in the event of a fire. However, the staff finds that the applicant's analysis of fire protection regulation does not completely capture the fire protection SSCs required for compliance with 10 CFR 50.48. The scope of SSCs required for compliance to 10 CFR 50.48 and GDC 3 goes beyond preserving the ability to maintain safe-shutdown in the event of a fire. GDC 3, states in part, "Fire detection and fighting systems of appropriate capacity and capability shall be provided and designed to minimize the adverse effects of fires on structures, systems, and components "important to safety." Furthermore, the general requirements provided in GDC 3 to "minimize the adverse effects of fires on SSC's important to safety" establish a general level of protection which is afforded to all systems, not only where required to prevent a loss of safe shutdown capability. 10 CFR 50.48(a) states, "Each operating nuclear power plant must have a fire protection plan that satisfies Criterion 3 of Appendix A of this part." The term "important to safety" encompasses a broader scope of equipment than safety-related and safe-shutdown equipment. Though there is a focus on the protection of safety-related equipment or safe-shutdown equipment, this does not imply that there is any exclusion of equipment which protects non-safety related equipment. For example, in accordance with 10 CFR 50.48, some portions of suppression systems may be required in plant areas where a fire could result in the release of radioactive materials to the environment, even if no safety-related or safe-shutdown equipment is located in that particular fire area. The staff finds this contrary to the UFSAR which includes the original Seabrook Station fire protection SE as the CLB.