POINT BEACH NUCLEAR PLANT, UNITS 1 AND 2 (PBN)
SUBSEQUENT LICENSE RENEWAL APPLICATION (SLRA)
REQUEST FOR ADDITIONAL INFORMATION (RAI)
SAFETY - SET 11

SLRA Section B.2.3.15, "Fire Protection"

RAI B.2.3.15-3 (Inspection of penetration seals and fire damper assemblies)

Regulatory Basis

Section 54.21(a)(3) of Title 10 of the *Code of Federal Regulations* (10 CFR) requires an applicant to demonstrate that the effects of aging for structures and components will be adequately managed so that the intended function(s) will be maintained consistent with the current licensing basis for the period of extended operation. One of the findings that the U.S. Nuclear Regulatory Commission (NRC) staff must make to issue a renewed license (10 CFR 54.29(a)) is that actions have been identified and have been or will be taken with respect to managing the effects of aging during the period of extended operation on the functionality of structures and components that have been identified to require review under 10 CFR 54.21, such that there is reasonable assurance that the activities authorized by the renewed license will continue to be conducted in accordance with the current licensing basis. In order to complete its review and enable making a finding under 10 CFR 54.29(a), the staff requires additional information in regard to the matters described below.

Background

The "corrective actions" program element in GALL-SLR Report AMP XI.M26, "Fire Protection," states, in part, that "During the inspection of penetration seals, if any sign of degradation is detected within that sample [emphasis added], the scope of the inspection is expanded to include additional seals in accordance with the plant's approved fire protection program."

SLRA Appendix A, Section 16.2.2.15, "Fire Protection," and Appendix B, Section B.2.3.15, "Fire Protection," state, in part, that "During the inspection of penetration seals and fire damper assemblies, if any sign of abnormal degradation is detected within the sample [emphasis added], the inspection sample size is expanded, in accordance with the approved PBN fire protection program, to include an additional 10 percent of each type [emphasis added] of sealed penetration or fire damper assembly."

The enhancement to the “monitoring and trending” and “corrective actions” program elements in SLRA Section B.2.3.15 states, “Enhance plant procedures to require an inspection of an additional 10 percent of a type of seal when more than 15 percent of the sample population does not meet any acceptance criteria [emphasis added] during the 18-month inspection period.”

The NRC staff notes that Routine Maintenance Procedure (RMP) 9057, “Fire Barrier Penetration Fire Seal Surveillance,” states, for fire dampers, that an additional 10 percent will be tested due to damper failure and that the additional testing continues until failures is less than 15 percent.

Issue

The NRC staff is unclear on whether the additional 10 percent is of each type of penetration seal or of a type of penetration seal, what is meant by “abnormal degradation,” and whether the additional 10 percent sample is inspected when any sign of degradation within the sample is detected or only when more than 15 percent of the sample does not meet any acceptance criteria.

Request

1. Please discuss, including the basis/justification, whether the Fire Protection program will include inspection of an additional 10 percent of each type of penetration seal or an additional 10 percent of a type of penetration seal.

2. Given that GALL-SLR AMP XI.M26 states “any sign of degradation,” please discuss what is meant by “abnormal degradation.”

3. Please discuss whether the additional 10 percent sample is inspected when any sign of degradation within the sample is detected or only when more than 15 percent of the sample does not meet any acceptance criteria. If the later, then provide the basis/justification for “more than 15 percent.” In addition, discuss the basis/justification for continuing additional testing for fire dampers until failures are less than 15 percent.