

## SeabrookNPEm Resource

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**From:** Plasse, Richard  
**Sent:** Thursday, December 09, 2010 2:24 PM  
**To:** Cliche, Richard  
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**Subject:** draft AMP RAIs  
**Sent Date:** 12/9/2010 2:23:44 PM  
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**From:** Plasse, Richard

**Created By:** Richard.Plasse@nrc.gov

**Recipients:**  
"Cliche, Richard" <Richard.Cliche@fpl.com>  
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MESSAGE	23	12/9/2010 2:23:00 PM
RAI B.docx	21600	

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### **dRAI B.2.1.30-1**

#### **Background**

GALL Report (NUREG-1801), AMP XI.S4, "10 CFR Part 50, Appendix J" Element 4 states that a containment LRT program is effective in detecting degradation of containment shells, liners, and components that compromise the containment pressure boundary, including seals and gaskets. While the calculation of leakage rates demonstrates the leak-tightness and structural integrity of the containment, it does not by itself provide information that would indicate that aging degradation has initiated or that the capacity of the containment may have been reduced for other types of loads, such as seismic loading. This would be achieved with the additional implementation of an acceptable containment inservice inspection program as described in XI.S1 and XI.S2. In addition, 10 CFR Part 50, Appendix J requires a general inspection of internal and external surfaces of the containment prior to a Type A test.

#### **Issue**

According to the applicant, the containment surfaces were inspected prior to the most recent Type A test which was performed in 2008 using the "Complex Procedure" for reactor containment integrated leakage rate testing. This "Complex Procedure" states that visual inspections of the exposed interior and exterior surfaces of the containment vessel and the containment enclosure building will be performed. Based on a review of the procedure, the staff noted that the containment inspection section of the procedure does not specify examination methods for conducting internal and external inspections that are consistent with ASME Section XI, Subsections IWE and IWL requirements.

#### **Request:**

The applicant is requested to provide the following information.

1. Describe the methods and procedures used to conduct a general inspection of internal and external surfaces of the containment prior to the most recent Type A test.
2. Indicate whether these methods and procedures are consistent with the containment inservice inspection programs described in GALL AMP XI.S1 and XI.S2.
3. Describe the method being used to ensure that internal and external containment inspections are being implemented as described in GALL AMP XI.S1 and XI.S2 and consistent with element 4 of GALL AMP XI.S4, "10 CFR Part 50, Appendix J."

The staff needs the above information to confirm that the effects of aging of the concrete containment will be adequately managed so that it's intended function will be maintained consistent with the current licensing basis for the period of extended operation, as required by 10 CFR 54.21(a)(3).

### **dRAI B.2.1.30-2**

#### **Background:**

GALL Report (NUREG-1801), AMP XI.S4, "10 CFR Part 50, Appendix J" states that Appendix J provides two options, A and B, either of which can be chosen to meet the requirements of a containment LRT program. Under Option A, all of the testing must be performed on a periodic interval. Option B is a performance-based approach. More detailed information for Option B is provided in Regulatory Guide (RG) 1.163 and NEI 94-01, Rev. 0.

NEI 94-01 states that a general visual inspection of the accessible interior and exterior surfaces of the containment system for structural deterioration which may affect the containment leak-tight integrity must be conducted prior to each test, and at a periodic interval between tests based on the performance of the containment system. In addition, NEI 94-01 recommended that these inspections be performed in conjunction or coordinated with the ASME Boiler and Pressure Vessel Code, Section XI, Subsection IWE/IWL required examinations.

Regulations for codes and standards in 10CFR 50.55a require personnel that examine containment concrete surfaces and tendon hardware, wires, or strands must meet the qualification provisions in IWA-2300 and that the "owner-defined" personnel qualification provisions in IWL-2310(d) are not approved for use.

In LRA B.2.1.30, the applicant states that the Seabrook Station Containment Leakage Rate Testing Program, required by Seabrook Station Technical Specification, implements Option B. In addition, the Seabrook Station Leakage Test Reference is based on the guidance provided in NEI 94-01 and ANSI / ANS-56.8-1994 with the restrictions identified in RG 1.163.

Issue:

During the audit of element 4, the staff reviewed the "Complex Procedure" for reactor containment integrated leakage rate testing and qualification guidance for personnel who conducted visual examinations of concrete containment surfaces. The staff concluded that the qualification of personnel who conducted visual examinations of concrete containment surfaces in 2005 and 2008 is not consistent with qualification provisions in IWA-2300 as required by 10 CFR 50.55a.

Request:

The applicant is requested to provide plans and schedule that will ensure that (1) personnel who perform visual examinations of concrete containment surfaces to comply with the applicant's commitment to implement Option B for integrated leakage rate tests and are qualified in accordance with IWA-2300 requirements and (2) the applicant's 10 CFR Part 50, Appendix J aging management program is consistent with GALL AMP XI.S4, "10 CFR Part 50, Appendix J."