NRR-PMDAPEm Resource

From: Saba, Farideh
Sent: Wednesday, October 15, 2014 3:30 PM
To: ken.frehafer@fpl.com
Cc: Lewis, Atanya (Atanya.Lewis@fpl.com); eric.katzman@fpl.com; Render, Diane
Subject: RAIs regarding SAINT LUCIE 2 - Fourth 10-year Interval Relief Request No. 4 for Visual Examination of the reactor Vessel and Associated piping (MF4473)
Attachments: Final StLucie-2 RAI MF4473.docx

Importance: High

Ken,

By letter dated June 30, 2014 (Accession No. ML14203A005), Florida Power and Light Company (FPL, the licensee) requested relief from the requirements of the American Society of Mechanical Engineers (ASME) Boiler and Pressure Vessel Code (ASME Code). The request relates the requirements for performing visual examinations of the reactor vessel and associated Class 1 and Class 2 piping in covered trenches rendered inaccessible in conjunction with the pressure testing of Class I and 2 components are provided in ASME Code Section XI, Articles IWA-5000, IWB-5000 and IWC-5000.

The NRC staff has reviewed the relief request submitted by FPL and determined that additional information is needed. By emails dated October 3 and 9, 2014, the draft request for additional information by Component Performance, NDE, Testing branch (EPNB) and Vessels & Integral Integrity Branch (EVIB), respectively, were sent to FPL to ensure that the questions were understandable, the regulatory basis for the questions was clear, and to determine if the information was previously docketed. FPl did not request any clarification call.

In order for the NRC staff to complete its review of this relief request in a timely manner, please provide FPL's responses to the attached request for additional information (RAIs) by November 15, 2014.

Thank you,

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Subject: RAIs regarding SAINT LUCIE 2 - Fourth 10-year Interval Relief Request No. 4 for Visual Examination of the reactor Vessel and Associated piping (MF4473)
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Options
Priority: High
Return Notification: No
Reply Requested: Yes
Sensitivity: Normal
Expiration Date:
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REQUEST FOR ADDITIONAL INFORMATION
RELEIF REQUEST NUMBER 4, VERSION 0, REGARDING SYSTEM LEAKAGE TEST OF CLASS 1 AND 2 PIPING IN COVERED TRENCHES IN REACTOR VESSEL BOTTOM HEAD AREA
FLORIDA POWER AND LIGHT COMPANY
SAINT LUCIE, UNIT 2
DOCKET NUMBER 50-389

By letter dated June 30, 2014 (Accession No. ML14203A005), Florida Power and Light Company (the licensee) requested relief from the requirements of the American Society of Mechanical Engineers (ASME) Boiler and Pressure Vessel Code (B&PV Code). The request relates the requirements for performing visual examinations of the reactor vessel and associated Class 1 and Class 2 piping in covered trenches rendered inaccessible in conjunction with the pressure testing of Class I and 2 components are provided in ASME Code Section XI, Articles IWA-5000, IWB 5000 and IWC-5000.

The NRC staff has reviewed the relief request submitted by FPL and determined that additional information is needed. The NRC staff requests that you respond to the following request for additional information (RAI) by Component Performance, NDE, Testing branch (EPNB) and Vessels & Integral Integrity Branch (EVIB).

EPNB RAI-1

For Class 1 components, the licensee requests relief under ASME Code, Section XI, articles IWA-5000 and IWB-5000. For class 1 components, IWB-5210 requires pressure testing in accordance with Table IWB 2500-1, Examination Category B-P. Table IWB-2500-1, Examination Category B-P requires a system leakage test in accordance with IWB 5220 prior to plant startup following a refueling outage and a VT-2 visual examination in accordance with IWA-5240. IWB-5220 establishes temperature requirements above ambient conditions. Tests are required every refueling outage.

a. Confirm that relief is being requested from the pressure and temperature requirements of IWB-5220. Additionally please confirm that an extension in the time interval between VT-2 inspections is being requested from once every refueling outage to once every period.

b. If an extension is being sought for the VT-2 examination of Class 1 components, please provide justification for this increase.

EPNB RAI-2

For Class 2 components, the licensee requests relief under ASME Code, Section XI, articles IWA-5000 and IWC-5000. For Class 2 components, IWC-5210 requires pressure testing in accordance with Table IWC 2500-1, Examination Category C-H. Table IWC-2500-1, Examination Category C-H requires a system leakage test in accordance with IWC 5220 and a VT-2 in accordance with IWA-5240. IWC-5220 establishes temperature requirements above ambient conditions. Tests are required each inspection period. Confirm that relief is being requested only from the pressure and temperature requirements of IWC-5220. Provide materials of construction for the Class 1 and 2 components for which relief is sought.

EPNB RAI-3

Discuss any industry or plant specific operating experience applicable to the components under consideration.

EPNB RAI-4

Discuss the hardship associated with visually inspecting Class 1 components each refueling outage under the proposed temperature and pressure conditions.

EVIB RAI-1

The American Society of Mechanical Engineers Boiler and Pressure Vessel Code (ASME BPVC) Section XI requires that Examination Category B-P, Item Number B15.10, the Reactor Vessel – Pressure Retaining Boundary Bottom Head Area be examined during each refueling outage at full pressure and temperature according to Table IWB-2500-1 and Article IWB-5000.

However, the licensee, in its relief request in Paragraph 2 under "Proposed Alternative" stated that "For those portions of components rendered inaccessible by Containment Building configuration, as an alternative to the requirements of IWA-5241, at least once each period during refueling FPL will open the inaccessible areas and perform a VT-2 examination of the reactor vessel bottom and other associated piping following plant cooldown and depressurization."

Explain how reducing frequency of inspections from each refueling outage to each period [3 times per a 10-year interval] during refueling outage for the reactor vessel bottom provides a level of quality and safety comparable to the current ASME Code requirements.