SeabrookNPEm Resource

From: Plasse, Richard
Sent: Tuesday, January 18, 2011 3:36 PM
To: Cliche, Richard
Subject: FW: SBK AMR-AMP RAI TRP 22 Closed Cycle Cooling Water Mintz Gavula - .doc
Attachments: SBK AMR-AMP RAI TRP 22 Closed Cycle Cooling Water Mintz Gavula - .doc

Draft RAIs

Hearing Identifier: Seabrook_License_Renewal_NonPublic
Email Number: 2242

Mail Envelope Properties (Richard.Plasse@nrc.gov20110118153600)

Subject: FW: SBK AMR-AMP RAI TRP 22 Closed Cycle Cooling Water Mintz Gavula - .doc
Sent Date: 1/18/2011 3:36:08 PM
Received Date: 1/18/2011 3:36:00 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	12	1/18/2011 3:36:00 PM	
SBK AMR-AMP RAI TRP 22 Closed Cycle Cooling Water Mintz Gavula - .doc			27762

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

RAI 3.3.1.46-1

Background

LRA Table 3.3.1, item 3.3.1-46 addresses stress corrosion cracking of stainless steel piping, piping components, piping elements, and heat exchangers exposed to closed-cycle cooling water at greater than 60 °C (140 °F). The LRA states that this line item is not used and LRA Table 3.3.2-29 does not show any other line item that addresses stress corrosion cracking for the stainless steel components in the primary component cooling water system. UFSAR Table 9.2-7 indicates that the stainless steel thermal barrier loop heat exchangers, which are included in the primary component cooling water system, have inlet temperatures of 80 °C (176.1 °F), creating the potential for stress corrosion cracking.

Issue

Current licensing basis information indicates that stainless steel components in the primary component cooling water system, specifically in the thermal barrier loop, may be subjected to closed cycle cooling water at temperatures greater than 60 °C (140 °F). However, the LRA neither addresses the potential for stress corrosion cracking of stainless steel components in the above system, nor provides sufficient information to justify the lack of potential.

Request

Provide information to demonstrate that stainless steel components in the primary cooling water system, including the thermal barrier cooling water system, are **not** exposed to closed cycle cooling water greater than 60 °C (140 °F), or provide information to demonstrate that there is no need to manage stress corrosion cracking of these components.

RAI B.2.1.12-7

Background

The GALL AMP XI.M21 states that the Closed-Cycle Cooling Water System Program includes activities to minimize and monitor corrosion. In addition, SRP-LR item 3.3.1-49 addresses loss of material due to microbiologically influenced corrosion for stainless steel heat exchanger components exposed to closed cycle cooling water. LRA Section B.2.1.12 cites ERPI 1007820, which states, “Microbiologically Influenced or Induced Corrosion is one of the main problems in closed cooling water systems.” LRA Section B.2.1.12 also describes the Closed Cycle Cooling Water System Program as managing loss of material due to general, crevice, pitting and galvanic corrosion, but does not include microbiologically influenced corrosion.

Issue

It was not clear if the Closed-Cycle Cooling Water System Program manages aging from microbiologically influenced corrosion.

Request

Clarify whether the Closed-Cycle Cooling Water System Program manages microbiologically influenced corrosion in the closed cycle cooling water systems, and either provide the bases for not needing to include this or the technical background on the 1) preventive actions, 2) parameters monitored, and 3) inspection techniques being conducted.