Davis-BesseNPEm Resource

From: CuadradoDeJesus, Samuel
Sent: Friday, July 15, 2011 2:19 PM
To: 'custerc@firstenergycorp.com'
Cc: 'dorts@firstenergycorp.com'
Subject: FW: Clarification Questions Related to DB Response to RAI 3.3.2.18-1
Attachments: DB RAI Clarification AMR TRP 101 SCC - Mintz_Min 7-13-2011 v51 (Resin Breakthrough).docx

Cliff:

See below and attachment. I'll add this topic in our Tuesday Teleconference. Is that ok?

From: Min, Seung
Sent: Friday, July 15, 2011 2:10 PM
To: CuadradoDeJesus, Samuel
Cc: Todd Mintz; Pham, Bo
Subject: Clarification Questions Related to DB Response to RAI 3.3.2.18-1

Good Afternoon, Sam,

Dr. Todd Mintz and I agreed that we need a teleconference call with DB to discuss the attached clarification questions related to DB response to RAI 3.3.2.18-1.
Thanks,
Seung Min

Hearing Identifier: Davis_BesseLicenseRenewal_Saf_NonPublic
Email Number: 2951

Mail Envelope Properties (Samuel.CuadradoDeJesus@nrc.gov20110715141900)

Subject: FW: Clarification Questions Related to DB Response to RAI 3.3.2.18-1
Sent Date: 7/15/2011 2:19:10 PM
Received Date: 7/15/2011 2:19:00 PM
From: CuadradoDeJesus, Samuel

Created By: Samuel.CuadradoDeJesus@nrc.gov

Recipients:
"'dorts@firstenergycorp.com'" <dorts@firstenergycorp.com>
Tracking Status: None
"'custerc@firstenergycorp.com'" <custerc@firstenergycorp.com>
Tracking Status: None

Post Office:

Files	Size	Date & Time
MESSAGE	525	7/15/2011 2:19:00 PM
DB RAI Clarification AMR TRP 101 SCC - Mintz_Min 7-13-2011 v51 (Resin Breakthrough).docx	19559	

Options
Priority: Standard
Return Notification: No
Reply Requested: No
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Clarification Questions Related to the Response to RAI 3.3.2.18-1

Background

By letter dated May 2, 2011, the staff issued RAI 3.3.2.18-1 to address and evaluate the applicant's operating experience described in LER 1998-002-01: the applicant's operating experience indicates that the degradation of the resin beads in Purification Demineralizer number 3 resulted in releases of sulfur compounds that caused the extensive pitting of the demineralizer internal screen and the breakthrough of the resin beads to the downstream piping. In its review, the staff noted that that a release of sulfur compounds can facilitate stress corrosion cracking in stainless steel components. In RAI 3.3.2.18-1, the staff requested that the applicant describe whether or not the stainless steel components in the makeup and purification system that were previously exposed to sulfur compounds have experienced stress corrosion cracking. In addition, the applicant was requested to justify why cracking due to stress corrosion cracking is not an aging effect requiring management for the stainless steel demineralizer tanks, including internal screens, and filter housing. The staff further requested that if the piping has experienced stress corrosion cracking, the applicant should justify why the One-Time Inspection Program is adequate to manage cracking due to stress corrosion cracking of the piping rather than a program that includes periodic inspections.

In its response dated June 3, 2011 to RAI 3.3.2.18-1, the applicant stated that a review of its operating experience reveals that the stainless steel components in the makeup and purification system that were previously exposed to sulfur compounds have not experienced stress corrosion cracking. The applicant also explained that stress corrosion cracking is not an aging effect requiring management for stainless steel demineralized tanks, including internal screen, and filter housing because the temperature in this system under normal operations is below 120 °F, which is less than the SCC threshold temperature in treated water. The applicant further stated that the LER did not identify cracking due to as an apparent cause and as corrective actions, the letdown flow path was flushed and a resin control program was instituted to prevent reoccurrence.

Request

Describe what activities are performed in the resin control program as corrective actions to prevent the reoccurrence of demineralizer resin breakthrough to the downstream piping of the demineralizers. In addition, describe whether or not the plant-specific operating experience indicates that the resin control program has been effective to prevent resin breakthrough to the downstream piping in the makeup and purification system.