

NRR-PMDAPEm Resource

From: Saba, Farideh
Sent: Wednesday, August 26, 2015 1:43 PM
To: Williams, Gordon Robert (grwilliams1@tva.gov); Hammargren, Benjamin John
Cc: Schroll, Edward Dustin (edschroll@tva.gov); Chernoff, Margaret
Subject: RAI for Browns Ferry Application to require SLC instrumentation in additional mode (MF5748, MF5749, and MF5750)

Importance: High

Gordon and Ben,

By letter dated February 17, 2015, (Agencywide Documents Access and Management System Accession No. ML15050A179), Tennessee Valley Authority, (TVA, the licensee), submitted a license amendment request (LAR), regarding Browns Ferry Nuclear (BFN) Plant, Units 1, 2 and 3 to modify Technical Specification 3.3.6.1, Primary Containment Isolation Instrumentation to incorporate an additional mode of applicability for the Standby Liquid Control (SLC) System initiation instrumentation

RAI STSB- 01:

The regulation at 10 CFR 50.36(c)(2) requires that Limiting Conditions for Operation (LCOs) be included in TSs. LCOs are the lowest functional capability or performance levels of equipment require or safe operation of a facility. LCOs must be established for items that meet one of four criteria contained in 10 CFR 50.36(c)(2)(ii). The regulations do not specify requirements for the contents of individual TSs.

The application states that the “use of the SLCS [Standby Liquid Control system] to control suppression pool pH below 7 is further discussed in Final Safety Analysis Report Section 14.6.3.5. This FSAR section describes the use of the SLCS operation to add sodium pentaborate solution to the suppression pool water in order to maintain it below a pH of 7 following a LOCA event.”

The NRC staff reviewed FSAR section 14.6.3.5. The FSAR section states that “the buffering effect of SLCS injection within several hours is sufficient to offset the effects of these acids that are transported to the pool. Sufficient sodium pentaborate solution is available to maintain the suppression pool pH at or above 7.0 for 30 days post-accident.” Section 3.8.1 of the FSAR states that the safety objective of the SLCS is to “... provide sufficient buffering agent to maintain the suppression pool pH at or above 7.0 following a DBA LOCA involving fuel damage.” This is consistent with the safety evaluation for full scale implementation of the alternative source term amendment.

Please clarify (1) whether the post LOCA suppression pool pH is calculated to be below 7 or at or above 7; (2) clarify the SLC system’s function in maintaining the post LOCA suppression pool pH; and (3) confirm that the calculated post LOCA suppression pool pH is consistent with the accident analysis assumptions.

As discussed with Mr. Ben Hammargren during our clarification call today (08/26/15), please respond to the above RAI by September 25, 2015.

Thank you,

Farideh

Farideh E. Saba, P.E.
Senior Project Manager

NRC/ADRO/NRR/DORL
301-415-1447
Mail Stop O-8G9A
Farideh.Saba@NRC.GOV

Hearing Identifier: NRR_PMDA
Email Number: 2355

Mail Envelope Properties (Farideh.Saba@nrc.gov20150826134300)

Subject: RAI for Browns Ferry Application to require SLC instrumentation in additional mode (MF5748, MF5749, and MF5750)
Sent Date: 8/26/2015 1:43:19 PM
Received Date: 8/26/2015 1:43:00 PM
From: Saba, Farideh

Created By: Farideh.Saba@nrc.gov

Recipients:

"Schrull, Edward Dustin (edschrull@tva.gov)" <edschrull@tva.gov>

Tracking Status: None

"Chernoff, Margaret" <Margaret.Chernoff@nrc.gov>

Tracking Status: None

"Williams, Gordon Robert (grwilliams1@tva.gov)" <grwilliams1@tva.gov>

Tracking Status: None

"Hammargren, Benjamin John" <bjhammargren@tva.gov>

Tracking Status: None

Post Office:

Files	Size	Date & Time
MESSAGE	2673	8/26/2015 1:43:00 PM

Options

Priority: High

Return Notification: No

Reply Requested: Yes

Sensitivity: Normal

Expiration Date:

Recipients Received: