

CCNPP3COLA PEmails

From: Steckel, James
Sent: Thursday, June 23, 2011 2:49 PM
To: CCNPP3COLA PEmails
Subject: FW: RAI No 104 RHEB 2093.doc (PUBLIC)
Attachments: RAI No 104 RHEB 2093.doc

From: John Rycyna
Sent: Monday, April 20, 2009 4:58 PM
To: Poche, Robert; McQueeney, Jennifer; katie.thurstin@unistarnuclear.com
Cc: CCNPP3COL Resource; Henry Jones; Richard Raione; Joseph Colaccino; James Biggins; Adam Gendelman
Subject: RAI No 104 RHEB 2093.doc (PUBLIC)

Rob,

Attached please find the subject request for additional information (RAI). A draft of the RAI was provided to you on April 7, 2009. No conference call was requested to discuss this RAI. The schedule we have established for review of your application assumes technically correct and complete responses within 30 days of receipt of RAIs. For any RAIs that cannot be answered within 30 days, it is expected that a date for receipt of this information will be provided to the staff within the 30 day period so that the staff can assess how this information will impact the published schedule.

John Rycyna, PE
Sr. Project Manager
Division of New Reactor Licensing
Office of New Reactors
U.S. Nuclear Regulatory Commission
301-415-4122

Hearing Identifier: CalvertCliffs_Unit3Cola_Public_EX
Email Number: 2406

Mail Envelope Properties (0AA17736E4C4154CA37233EEBFC8DEB27400C0E1E5)

Subject: FW: RAI No 104 RHEB 2093.doc (PUBLIC)
Sent Date: 6/23/2011 2:48:48 PM
Received Date: 6/23/2011 2:48:50 PM
From: Steckel, James

Created By: James.Steckel@nrc.gov

Recipients:
"CCNPP3COLA PEmails" <CCNPP3COLA.PEmails@nrc.gov>
Tracking Status: None

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Files	Size	Date & Time
MESSAGE	1062	6/23/2011 2:48:50 PM
RAI No 104 RHEB 2093.doc	27246	

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

Request for Additional Information No. 104
4/20/2009

Calvert Cliffs Unit 3
UniStar
Docket No. 52-016

SRP Section: 02.04.13 - Accidental Releases of Radioactive Liquid Effluents in Ground and Surface Waters
Application Section: FSAR Section 2.4

QUESTIONS for Hydrologic Engineering Branch (RHEB)

02.04.13-1

Provide confirmation of, and the technical basis for, the use of the Reactor Coolant Storage Tank as the source tank with the greatest inventory for the purposes of the accidental release analysis.

02.04.13-2

Provide a reference for the radionuclide activities used as the source in the accidental release analysis (FSAR Table 2.4-44).

02.04.13-3

Provide information on the presence or absence of chelating agents in the tank used for the source in the accidental release analysis. Also discuss the planned use of any chemical agents anywhere at the site which could modify the radionuclide transport characteristics of the sub-surface region.

02.04.13-4

Provide a discussion of the technical basis for concluding that the postulated groundwater pathway is conservative, including discussion of the following:

- The assumption that a transport analysis that does not consider hydrodynamic dispersion is conservative for a constituent subject to decay;
- A conservative analysis of the limiting value for a radionuclide mixture considers the possible combination of radionuclides at the boundary of the unrestricted area due to variation in K_d values and does not simply assume minimum K_d values for all radionuclides in the mixture;
- Possible alternative pathways, e.g., to the underlying aquifer or to St. John's Creek and Branch 3;
- The impact of site construction (excavation and fill) on possible alternative transport pathways;

- Consistency with FSAR Sections 2.4.12 and 2.5.4.