CCNPP3COLA PEmails

From: Arora, Surinder
Sent: Thursday, June 03, 2010 2:54 PM
To: 'Poche, Robert'; 'cc3project@constellation.com'
Cc: CCNPP3COL Resource; Raione, Richard; Jones, Henry; Colaccino, Joseph; Biggins, James; Vrahoretis, Susan; Steckel, James
Subject: Draft RAI 249 RHEB 4622
Attachments: Draft RAI 249 RHEB 4622.doc

Rob,

Attached is DRAFT RAI No. 249 (eRAI No. 4622). You have until June 17, 2010, to review this RAI and decide whether you need a conference call to discuss the question in this RAI before the final issuance. After the phone call or on June 17, 2010, the RAI will be finalized and sent to you for response. You will then have 30 days to provide a technically complete response or an expected response date for the RAI.

Thanks.

SURINDER ARORA, PE
PROJECT MANAGER,
Office of New Reactors
US Nuclear Regulatory Commission

Phone: 301 415-1421
FAX: 301 415-6406
Email: Surinder.Arora@nrc.gov

Hearing Identifier: CalvertCliffs_Unit3Cola_Public_EX
Email Number: 1403

Mail Envelope Properties (B46615B367D1144982B324704E3BCEED21F1424279)

Subject: Draft RAI 249 RHEB 4622
Sent Date: 6/3/2010 2:54:25 PM
Received Date: 6/3/2010 2:54:34 PM
From: Arora, Surinder

Created By: Surinder.Arora@nrc.gov

Recipients:
"CCNPP3COL Resource" <CCNPP3COL.Resource@nrc.gov>
Tracking Status: None
"Raione, Richard" <Richard.Raione@nrc.gov>
Tracking Status: None
"Jones, Henry" <Henry.Jones@nrc.gov>
Tracking Status: None
"Colaccino, Joseph" <Joseph.Colaccino@nrc.gov>
Tracking Status: None
"Biggins, James" <James.Biggins@nrc.gov>
Tracking Status: None
"Vrahoretis, Susan" <Susan.Vrahoretis@nrc.gov>
Tracking Status: None
"Steckel, James" <James.Steckel@nrc.gov>
Tracking Status: None
"'Poche, Robert'" <Robert.Poche@constellation.com>
Tracking Status: None
"'cc3project@constellation.com'" <cc3project@constellation.com>
Tracking Status: None

Post Office: HQCLSTR01.nrc.gov

Files	**Size**	**Date & Time**
MESSAGE	648	6/3/2010 2:54:34 PM
Draft RAI 249 RHEB 4622.doc	31738	

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

Request for Additional Information No. 249 (eRAI 4622)
DRAFT
6/3/2010

Calvert Cliffs Unit 3
UniStar
Docket No. 52-016
SRP Section: 02.04.05 - Probable Maximum Surge and Seiche Flooding
Application Section: FSAR Section 2.4

QUESTIONS for Hydrologic Engineering Branch (RHEB)

02.04.05-6

To meet the requirements of GDC 2, 10 CFR 52.17, and 10 CFR Part 100, estimates of the probable maximum hurricane (PMH) and the probable maximum storm surge are needed. The storm surge induced by the PMH should be estimated as recommended by Regulatory Guide 1.59, supplemented by current best practices. The following relates to RAI No. 103 (eRAI 2089), Questions 02.04.05-2 & 02.04.05-4:

The applicant's estimation of the effects of the Probable Maximum Storm Surge (PMSS) are based on the estimation of storm surge using two approaches: (i) storm surge water surface elevations obtained from Regulatory Guide 1.59 and adjusted for CCNPP site location using procedures described in U.S. Army Corps of Engineers (USACE) report, "Storm Surge Analysis and Design Water Level Determinations," (USACE, 1986), ANSI/ANSI 2.8-1992 and the model developed for the Chesapeake Bay (USACE, 1959), and (ii) extrapolation from storm surge values obtained from the NOAA model "Sea, Lake, and Overland Surges from Hurricanes (SLOSH)" near the CCNPP site for Category 1 through 5 hurricanes.

The maximum PMSS water surface elevations obtained by using the extrapolation procedure described above may not be technically valid or conservative. Please either provide additional justification for the method used to determine PMSS demonstrating technical validity and appropriate conservatism or provide the following information: (a) an analysis of the PMSS event using a conservative approach such as those predicted by a storm surge model (e.g., SLOSH) with input from appropriate PMH scenarios, (b) reasons why the use of historical estimations of sea level rise (SLR) is more conservative than current climatic predictions, and (c) if factored into the PMSS analysis (i.e., application of margins), a detailed description of the process for determining uncertainty estimations.