

CCNPP3COLA NPEmails

From: John Rycyna
Sent: Tuesday, October 14, 2008 8:51 AM
To: Wrobel, George
Cc: CCNPP3COL Resource; Joseph Colaccino; Rebecca Karas; Clifford Munson; Sarah Gonzalez
Subject: RAI No 19 RGS 1210.doc
Attachments: RAI No 19 RGS 1210.doc

George,

Attached please find the subject request for additional information (RAI). A draft of the RAI was provided to you on September 29, 2008. 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
Project Manager
Division of New Reactor Licensing
Office of New Reactors
U.S. Nuclear Regulatory Commission
301-415-4122

Hearing Identifier: CalvertCliffs_Unit3Cola_NonPublic_EX
Email Number: 203

Mail Envelope Properties (499C2FC6BB962446994CA8682D8ADF330DE39FD26F)

Subject: RAI No 19 RGS 1210.doc
Sent Date: 10/14/2008 8:51:17 AM
Received Date: 10/14/2008 8:51:19 AM
From: John Rycyna

Created By: John.Rycyna@nrc.gov

Recipients:

"CCNPP3COL Resource" <CCNPP3COL.Resource@nrc.gov>
Tracking Status: None
"Joseph Colaccino" <Joseph.Colaccino@nrc.gov>
Tracking Status: None
"Rebecca Karas" <Rebecca.Karas@nrc.gov>
Tracking Status: None
"Clifford Munson" <Clifford.Munson@nrc.gov>
Tracking Status: None
"Sarah Gonzalez" <Sarah.Gonzalez@nrc.gov>
Tracking Status: None
"Wrobel, George" <George.Wrobel@unistarnuclear.com>
Tracking Status: None

Post Office: HQCLSTR02.nrc.gov

Files	Size	Date & Time
MESSAGE	765	10/14/2008 8:51:19 AM
RAI No 19 RGS 1210.doc	26222	

Options

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

Request for Additional Information No. 19 Revision 2
10/14/08

Calvert Cliffs Unit 3
UniStar
Docket No. 52-016
SRP Section: 03.07.04 - Seismic Instrumentation
Application Section: 3.7.4

QUESTIONS for Geosciences and Geotechnical Engineering Branch 1 (RGS1)

03.07.04-1

In order to determine whether plant shutdown is required after an earthquake, Regulatory Position 4.1.1 of Regulatory Guide 1.166 states that “[t]he OBE [operating basis earthquake ground motion] response spectrum check is performed using the lower of:

1. The spectrum used in the certified standard design, or
2. A spectrum other than (1) used in the design of any Seismic Category I structure.”

Section 3.7.4.4 of the U.S. EPR FSAR states that “the application of OBE Exceedance Criteria is based on the following:

- i. For the certified design portion of the plant, the OBE ground motion is one-third of the certified seismic design response spectra (CSDRS).
- ii. For the safety-related noncertified design portion of the plant, the OBE ground motion is one-third of the site-specific SSE design motion response spectra, as described in Section 3.7.1.
- iii. The threshold response spectrum ordinate criterion to be used in conjunction with RG 1.166 is the lowest of (i) and (ii).”

Section 3.7.1.1.1 of the applicant’s FSAR states that “[t]he horizontal SSE [safe-shutdown earthquake] ground motion is defined as the envelope of the GMRS [Ground Motion Response Spectra] and the set of CSDRS [Certified Seismic Design Response Spectra] curves anchored at 0.1 g peak ground acceleration. The vertical SSE spectrum is defined as the vertical GMRS.” In addition, the applicant’s FSAR, in Section 3.7.1.1.1, describes the design response spectra of several site-specific Category I structures (including the Ultimate Heat Sink Makeup Water Intake Structure), which differ from the SSE. The NRC staff requests the applicant to specify the OBE which would be used to determine whether shutdown would be required following a seismic event.