PMVogtleCOLPEm Resource

From: Patel, Chandu
Sent: Tuesday, May 12, 2009 11:30 AM
To: Agaughtm@Southernco.com; Wasparkm@Southernco.com
Cc: VogtleCOL Resource; Joshi, Ravindra
Subject: Draft RAI 2653
Attachments: Draft RAI 2653.doc

To All,

Attached is a draft RAI 2653 related to SRP Section 3.7.2 for Vogtle. If you would like to schedule a conference call to discuss this RAI, please let me know before 5:00 PM on May 15, 2009. If no request for a conference call is received, this RAI will be issued as Final.

Thanks,

Chandu P. Patel
Senior Project Manager
AP1000 Project
NRO/DNRL/NWE1
US NRC
301-415-3025.

Hearing Identifier: Vogtle_COL_Public
Email Number: 106

Mail Envelope Properties (DC2088DF7F51A8499309AA4A35D0C1E01E84D3B8E5)

Subject: Draft RAI 2653
Sent Date: 5/12/2009 11:30:25 AM
Received Date: 5/12/2009 11:30:27 AM
From: Patel, Chandu

Created By: Chandu.Patel@nrc.gov

Recipients:
"VogtleCOL Resource" <VogtleCOL.Resource@nrc.gov>
Tracking Status: None
"Joshi, Ravindra" <Ravindra.Joshi@nrc.gov>
Tracking Status: None
"Agaughtm@Southernco.com" <Agaughtm@Southernco.com>
Tracking Status: None
"Wasparkm@Southernco.com" <Wasparkm@Southernco.com>
Tracking Status: None

Post Office: HQCLSTR02.nrc.gov

Files	**Size**	**Date & Time**
MESSAGE	443	5/12/2009 11:30:27 AM
Draft RAI 2653.doc	29178	

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

Request for Additional Information No. 2653 Revision 0

Vogtle
Southern Nuclear Operating Co.
Docket No. 52-0025 and 52-0026
SRP Section: 03.07.02 - Seismic System Analysis
Application Section: 3.7.2

QUESTIONS for Structural Engineering Branch 1 (AP1000/EPR Projects) (SEB1)

03.07.02-***

RAI 3.07.02-1 Follow Up

RAI 3.07.02-1 requested the applicant to justify the adequacy of the 2D SASSI analyses for predicting in-structure response spectra (ISRS).

In response, the applicant submitted a summary report entitled, “3-D SSI Analysis of AP1000 at Vogtle Site Using NI15 Model for VEGP Units 3 and 4”, which provides a description of the Vogtle site-specific 3D SSI analysis. The details of the nuclear island structural modeling are described in Section 5, “Structural Model”. Section 5 states that the AP1000 structural model used for Vogtle site-specific SSI analysis is a 3-D finite element model defined as NI15, developed by Westinghouse (WEC). This section also states that the NI15 was verified by WEC by assuring that the mass distribution, the modal behavior and floor response spectra results were consistent in ANSYS with WEC’s most detailed model, NI10, used for hard rock.

The staff reviews the procedures used for analytical modeling under SRP Section 3.7.2. To perform this review, please provide (1) the details of the applicant's comparison of the NI15 and NI10 model results (referenced in Section 5 of the aforementioned report) and (2) the details of the applicant's comparison of the NI15 and NI20 SASSI model results. Additionally, the staff notes that the AP1000 DCD design basis for soil sites is the NI20 SASSI model. Please explain whether the applicant's use of the NI15 model constitutes a departure from the DCD.