

NRR-PMDAPEm Resource

From: Mackaman, Clyde Douglas [cdmackaman@tva.gov]
Sent: Monday, July 30, 2012 4:37 PM
To: Lingam, Siva
Cc: Casey, Kevin E; Carter, Scott C; Gish, Roger D; william.foxIV@areva.com; Gillman, Marie
Subject: RE: Sequoyah 1 - Heavy Loads LAR (TAC No. ME7225)

Siva,

Based on input from the TVA Steam Generator Team, the determination for the soil-structure interaction on the Outside Lift System (OLS) did not use this software (SASSI) and, as such, the identified flaw in the software does not affect the soil-structure interaction calculation for the SQN Heavy Loads LAR.

GTStrudl was used to model the crane. In Strudl, the base node (bottom "center" of the crane) was the single "support" of the crane, leaving all the other nodes to react based on the external forces applied to that node. The forces were those defined by the amplified response spectra which was determined from an earlier calculation (CSG-87-018). The soil-structure interaction was incorporated into the analysis as spring stiffnesses into the support node.

Clyde Mackaman

TVA Corp. Licensing
423-751-2834

From: Lingam, Siva [<mailto:Siva.Lingam@nrc.gov>]
Sent: Monday, July 30, 2012 9:34 AM
To: Mackaman, Clyde Douglas
Cc: Hoang, Dan
Subject: Sequoyah 1 - Heavy Loads LAR (TAC No. ME7225)

The subject LAR indicated that the soil-structure interaction effects at the OLS ring foundation have been calculated. DOE published an article regarding operating experience level 3 (OE-3: 2011-02, August 2011; SASSI Software Problem) stating that there is flaw in the System for Analysis of Soil-Structure Interaction (SASSI) subtraction method. Which method TVA used for soil-structure interaction? If SASSI subtraction method was utilized by TVA, please let us know whether TVA took care of DOE concern ASAP.

Siva P. Lingam
U.S. Nuclear Regulatory Commission
Project Manager (NRR/DORL/LPL2-2)
Sequoyah Nuclear Plant
Crystal River Nuclear plant (EPU)
Location: O8-D5; Mail Stop: O8-G9a
Telephone: 301-415-1564; Fax: 301-415-1222
E-mail address: siva.lingam@nrc.gov

Hearing Identifier: NRR_PMDA
Email Number: 430

Mail Envelope Properties (3636053362D0844A86C2882FA403399306D2873B)

Subject: RE: Sequoyah 1 - Heavy Loads LAR (TAC No. ME7225)
Sent Date: 7/30/2012 4:36:36 PM
Received Date: 7/30/2012 4:36:49 PM
From: Mackaman, Clyde Douglas

Created By: cdmackaman@tva.gov

Recipients:

"Casey, Kevin E" <kecasey@tva.gov>
Tracking Status: None
"Carter, Scott C" <scarter@tva.gov>
Tracking Status: None
"Gish, Roger D" <rdgish@tva.gov>
Tracking Status: None
"william.foxIV@areva.com" <william.foxIV@areva.com>
Tracking Status: None
"Gillman, Marie" <mgillman@tva.gov>
Tracking Status: None
"Lingam, Siva" <Siva.Lingam@nrc.gov>
Tracking Status: None

Post Office: TVAMSSXVS1.main.tva.gov

Files	Size	Date & Time
MESSAGE	1899	7/30/2012 4:36:49 PM

Options

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