

August 31, 2007

MEMORANDUM TO: Stacey L. Rosenberg, Chief
Special Projects Branch
Division of Policy and Rulemaking
Office of Nuclear Reactor Regulation

FROM: Tanya M. Mensah, Senior Project Manager **/RA/**
Special Projects Branch
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SUBJECT: SUMMARY OF THE AUGUST 9, 2007, CATEGORY 2 PUBLIC
MEETING WITH THE NUCLEAR ENERGY INSTITUTE (NEI):
ADVANCED FINITE ELEMENT FRACTURE MECHANICS ANALYSES
(TAC NO. MD0694)

On August 9, 2007, a Category 2 public meeting was held between the U. S. Nuclear Regulatory Commission (NRC) staff and industry representatives at the Bethesda North Marriot Hotel and Conference Center in North Bethesda, Maryland. A list of attendees is enclosed. The purpose of this meeting was for the industry representatives to present the results and conclusions of their advanced finite element analyses (FEA) project. This project was undertaken to address NRC staff concerns regarding pressurizer dissimilar metal nozzle welds.

The August 9, 2007, meeting was the final public meeting, in a series of public meetings related to the Wolf Creek pressurizer nozzle weld flaws found in October 2006. Previous public meetings to discuss this topic were held on November 16, 2006 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML063320131), November 30, 2006 (ADAMS Accession No. ML063560371), December 20, 2006 (ADAMS Accession No. ML070330381), March 7, 2007 (ADAMS Accession No. ML070740752), May 1, 2007 (ADAMS Accession No. ML071360367), and May 8, 2007 (ADAMS Accession No. ML071570520), May 31-June 1, 2007 (ADAMS Accession No. ML071620384), and June 19-20, 2007 (ADAMS Accession No. ML071860664).

The NRC staff opened the meeting by stating that the purpose of the meeting was to exchange information regarding the analyses, summary, and conclusions supporting the advanced FEA project but that the meeting would not be for decision making. The NRC staff provided feedback that the industry technical report (ADAMS Accession No. ML072200195), which presents the results and conclusions of their advanced FEA, was thorough, well-constructed, and reflective of the collaborative ongoing discussions between the NRC staff and industry representatives to address pressurizer dissimilar metal nozzle welds. Opening remarks provided by industry representatives reinforced the NRC staff's comments that this effort has been performed on an aggressive schedule which required close coordination with the NRC staff to address any concerns or questions regarding the advanced FEA project.

The industry representatives made a presentation on the various input parameters, methodology, and sensitivity cases which supported their advanced FEA project conclusions. Specifically, the industry representatives concluded that the advanced FEA effort demonstrated the viability of leak detection to preclude the potential for rupture for the pressurizer nozzle dissimilar metal welds in the group of the subject pressurized water reactors (PWRs). The industry representatives' presentations are available in ADAMS as Accession No. ML072260029.

The NRC staff made a presentation that summarized the chronology of the advanced FEA project, the development of the NRC confirmatory program to benchmark, verify, and evaluate industry's analyses and results, and to analyze a set of additional sensitivity cases to address uncertainties the NRC staff considered remaining in a number of areas. The NRC staff analyses provided reasonably similar results to the industry's analyses. The NRC staff also discussed its plans to complete written safety assessments by the end of August and issue letters to the licensees of nine PWR plants shortly thereafter. A more detailed summary of the NRC staff's presentation is available in ADAMS as Accession No. ML072260030.

Closing remarks provided by Mr. Jack Grobe, Associate Director for Engineering and Safety Systems, conveyed to the industry representatives that the technical discipline of the NRC staff and the industry representatives on this effort was impressive. He also stated that due to the extraordinary level of coordination between the NRC staff and industry representatives, the NRC staff was in a good position to complete its review without requesting additional input from industry.

Members of the public were in attendance. No public meeting feedback forms were received.

Project Nos. 669 and 689

Enclosure: List of Attendees

cc w/encl: See next page

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ADAMS Package Accession No. ML072410354
Meeting Notice Accession No. ML071910341
Meeting Handout Accession Nos. ML072260029, ML072260030
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NRC-001

OFFICE	PSPB/PM	PSPB/LA	DCI	PSPB/BC
NAME	TMensah	DBaxley	TSullivan	SRosenberg
DATE	8/31 /07	8/31 /07	8/31 /07	8/ 31 /07

List of Attendees for August 9, 2007	
Name	Organization
Bill Bateman	NRC
Michael J. Berg	STP Nuclear Operating Company
John Broussand	Dominion Engineering
Paul Crooker	EPRI
Aladar Csontos	NRC
Guy DeBoo*	Exelon
Mason Dove	Southern Nuclear
Rudy Gil	FPL
Lee Goyette*	PG&E
Jack Grobe	NRC
Mauricio Gutierrez	NRC
Craig Harrington	Electric Power Research Institute (EPRI)
Daniel Horner*	McGraw-Hill
Christine King	EPRI
Melanie Lyons	NEI
Terry McAlister	SCANA
Tanya Mensah	NRC
Deann Raleigh*	Sciencetech
Pete Riccaroella*	Structural Integrity
Jim Riley	Nuclear Energy Institute (NEI)
David Rudland	NRC (Contractor)
Simon Sheng	NRC
Do-Jun Shim	EMC ²
William Sims	Entergy
Edmund Sullivan	NRC
Jay Thayer	NEI
Glenn White	Dominion Engineering, Inc.
Ken Yoon	AREVA NP

* Participated by teleconference

ENCLOSURE

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Electric Power Research Institute

Project No. 689
Project No. 669

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