

May 25, 2011

MEMORANDUM TO: Michael J. Case, Director
Division of Engineering
Office of Nuclear Regulatory Research

FROM: Aladar A. Csontos, Chief */RA/*
Component Integrity Branch
Division of Engineering
Office of Nuclear Regulatory Research

SUBJECT: NOTICE OF PUBLIC MEETING BETWEEN THE NUCLEAR
REGULATORY COMMISSION STAFF AND
REPRESENTATIVES OF THE NUCLEAR POWER INDUSTRY
REGARDING WELD RESIDUAL STRESS ANALYSIS
VALIDATION

DATE & TIME: Tuesday, June 14, 2011
9:00AM – 5:00PM
Wednesday, June 15, 2011
9:00AM – 5:00PM

LOCATION: U.S. Nuclear Regulatory Commission
Office of Nuclear Regulatory Research
Conference Room 5C19
21 Church Street
Rockville, MD 20850

PURPOSE: The purpose of this meeting is to discuss weld residual stress
finite element analysis techniques, and their validation against
measurements on representative structures.

CATEGORY 2: * This is a Category 2 meeting. The public is invited to participate in
this meeting by discussing regulatory issues with the NRC at
designated points identified on the agenda.

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* Commission's Policy Statement on "Enhancing Public Participation in NRC Meetings"
(67 FR 36920), May 28, 2002

M. Case

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PARTICIPANTS:

Participants from the NRC include members of the Office of Nuclear Regulatory Research.

NRC

Howard Rathbun (RES)
David Rudland (RES)
Aladar Csontos (RES)
et al.

Industry

Warren Bamford (Westinghouse)
Paul Crooker (EPRI)
John Broussard (DEI)
et al.

Enclosure:
Agenda

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NAME	H. Rathbun	H. Rathbun	A. Csontos	M. Case
DATE	05/24/11	05/24/2011	05/25/11	05/25/11

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Agenda for Meeting Between the Nuclear Regulatory Commission Staff and Representatives of the Nuclear Power Industry Regarding Weld Residual Stress Finite Element Analysis Validation

Date: Tuesday, June 14, and Wednesday, June 15, 2011

Location:

U.S. Nuclear Regulatory Commission, Office of Nuclear Regulatory Research
Conference Room 5C19, 21 Church Street, Rockville, MD 20850

Tuesday, June 14, 2011

<u>Time</u>	<u>Topic</u>	<u>Presenter</u>
9:00 a.m. – 9:15 a.m.	Introductions and Review of Meeting Agenda	H. Rathbun / P. Crooker
9:15 a.m. – 10:00 a.m.	<u>Program Overview</u> Description of Program Phases Actions Completed and Remaining Documentation Plans and Schedule for NRC and Industry	P. Crooker / H. Rathbun
10:00 a.m. – 10:45 a.m.	<u>Phase 1: Plates and Cylinders</u>	J. Broussard
10:45 a.m. – 11:00 a.m.	Break	
11:00 a.m. – 12:00 p.m.	<u>Phase 2: International Round Robin</u>	H. Rathbun
12:00 p.m. – 1:15 p.m.	Break for lunch - walk to Rockville Town Center	
1:15 p.m. – 2:15 p.m.	<u>Phase 3: Safety / Relief Valve Nozzles</u>	L. Fredette / M. Kerr / J. Broussard
2:15 p.m. – 3:15 p.m.	<u>Phase 4: Cold Leg Nozzle</u>	B. Brust / D. Killian / F. Ku / L. Fredette
3:15 p.m. – 3:30 p.m.	Break	
3:30 p.m. – 4:00 p.m.	<u>Electricite de France WRS R&D Program</u>	F. Hasnaoui
4:00 p.m. – 5:00 p.m.	<u>Industry Weld Residual Stress Finite Element Analysis Experience</u>	W. Bamford / S. Marlette

Wednesday, June 15, 2011

9:00 a.m. – 10:30 a.m.	<u>Thermal Models and Welding Parameters</u>	J. Broussard / D. Rudland
10:30 a.m. – 10:40 a.m.	Break	
10:40 a.m. – 11:15 a.m.	<u>Treatment of Annealing in WRS Analysis</u>	L. Fredette
11:15 a.m. – 12:00 p.m.	<u>Material and Hardening Laws</u>	H. Rathbun / B. Brust
12:00 p.m. – 1:15 p.m.	Break for lunch - walk to Rockville Town Center	
1:15 p.m. – 2:00 p.m.	<u>Bead Geometry, Element Initialization, Mesh Refinement and Sequence of Deposition</u>	J. Broussard
2:00 p.m. – 3:00 p.m.	<u>Documentation of Findings and Conclusions</u> Major points to be included in Modeling Handbook and Review guidelines	J. Broussard / H. Rathbun
3:00 p.m. – 3:10 p.m.	Break	
3:10 p.m. – 4:00 p.m.	<u>On-going and Future Work</u> 3-D Modeling of Weld Repairs Other topics	P. Crooker / H. Rathbun
4:00 p.m. – 5:00 p.m.	Discussion of regulatory issues with members of the public and NRC staff	H. Rathbun
5:00 p.m.	Adjourn	