

February 1, 2001

MEMORANDUM TO: Cynthia A. Carpenter, Chief
Generic Issues, Environmental, Financial
and Rulemaking Branch
Division of Regulatory Improvement Programs
Office of Nuclear Reactor Regulation

FROM: Peter C. Wen, Project Manager/**B**/
Generic Issues, Environmental, Financial
and Rulemaking Branch
Division of Regulatory Improvement Programs
Office of Nuclear Reactor Regulation

SUBJECT: SUMMARY OF JANUARY 25, 2001, MEETING WITH THE NUCLEAR
ENERGY INSTITUTE AND THE PRESSURIZED-WATER REACTOR
OWNERS GROUP MATERIAL RELIABILITY PROJECT REGARDING
REACTOR COOLANT SYSTEM HOT-LEG WELD CRACK ISSUES

On January 25, 2001, a public meeting was held at the Nuclear Regulatory Commission (NRC) offices in Rockville, Maryland. The participants included members of the NRC staff and representatives from the Nuclear Energy Institute (NEI), the pressurized- water reactor owners group (PWROG) Material Reliability Project (MRP) and licensees. Attachment 1 lists attendees at the meeting and Attachment 2 contains the meeting agenda.

In response to the recently identified reactor coolant system hot-leg piping weld cracks at the V.C. Summer and foreign plants, NEI, on December 14, 2000, sent a letter to NRC, indicating industry's willingness to take initiative to address the potentially generic implications of these pipe cracks. (This letter is available under ADAMS Accession Number ML003779569). The purpose of this meeting was for the industry representatives to brief the staff on their planned generic activities.

Following opening remarks by Mr. Jack Strosnider of the Office of Nuclear Reactor Regulation and Mr. David Modeen of NEI, Mr. Larry Mathews, Chairman of MRP's Alloy 600 Issue Task Group, discussed the issue background and industry planned activities. His presentation materials are in Attachment 3. The major points are as follows:

- The presentation represented a "preliminary" program plan. The program has not been finalized and has not yet been funded. This program will be reviewed by the EPRI advisory council in the next week or so and also will be reviewed at a meeting of the MRP Chief Nuclear Officer's steering committee on February 15, 2001.

- The organization established by industry to take the lead in developing an industry plan is MRP's Alloy 600 Issue Task Group with three committees reporting to it: Assessment, Inspection, and Repair/Mitigation.
- The Assessment Committee will perform an assessment to document that continued operation for Alloy 82/182 welds is acceptable. This assessment is the MRP's highest priority task. They will also assess cracking in all Alloy 82/182 applications in the primary system for all PWR vendor types. However, no schedule for completing the assessment was provided at this time.
- The Inspection Committee will deal with near-term issues, e.g., what type of inspections should be done during the 2001 spring outages and what should be done for longer term NDE development and qualification.
- The Repair and Mitigation Committee will be looking at how to enhance repair methods and at methods to mitigate or avoid cracking.

The staff provided the following feedback:

- (1) The staff considered that MRP's preliminary program appears to be a fairly comprehensive approach to assessing the safety of PWR pipe cracking- the scope appears appropriate and the technical issues appear right.
- (2) The organization of the MRP appears to address the right issues.
- (3) The staff indicated that this dialogue with industry is part of the newly implemented Generic Communication/Industry Initiative process. Specifically, the staff pointed out that the generic communication process includes this step of interacting with the industry to understand what industry plans to do to address an emerging issue, and based on the industry's proposed initiative, the staff would determine whether or not regulatory action, e.g., a Generic Letter, would be necessary. In this context, the staff acknowledged the preliminary nature of the MRP's presentation/program and said that the staff would need more information to make a regulatory decision. The staff expressed the desire that the industry's program be better finalized so that a schedule could be presented at the NRC-NEI/MRP management meeting on February 16, 2001.
- (4) The staff stated that the industry's first priority should be to have a safety assessment to demonstrate why continued operation is acceptable before industry implements its proposed program. The staff pointed out that the planned safety assessment MRP presented was quite comprehensive but would take some time to complete. The staff suggested that MRP perform a shorter term safety assessment that could be completed more quickly. MRP agreed that this is something they could do and that it would be a good idea. The staff asked MRP to provide a status on this at the February 16, 2001, meeting and offered to have a meeting on the safety assessment whenever MRP is ready.

- (5) Finally, the staff told MRP that they are very interested in understanding what inspections would be performed during the 2001 spring outages. The staff said that they would like to meet with MRP on this subject before the outage season begins and that they would like to visit the EPRI NDE center to see the status of activities.

The next scheduled meeting on this subject is the NRC-NEI/MRP senior management meeting to be held on February 16, 2001.

Attachments: As stated
cc w/atts: See next page

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Rich Emch

Ramin Assa

Karen Cotton

L. B. Marsh

Chuck Petrone

NRC-NEI/MRP MEETING on RCS HOT-LEG WELD CRACK ISSUES
LIST OF ATTENDEES
January 25, 2001

<u>NAME</u>	<u>ORGANIZATION</u>
Jack Strosnider	NRR/DE
Bill Bateman	NRR/DE/EMCB
Keith Wichman	NRR/DE/EMCB
Gene Carpenter	NRR/DE/EMCB
Simon Sheng	NRR/DE/EMCB
Allen Hiser	NRR/DE/EMCB
Ed Andruszkiewicz	NRR/DE/EMCB
Barry Elliot	NRR/DE/EMCB
William Koo	NRR/DE/EMCB
Don Naujock	NRR/DE/EMCB
Mathew Mitchell	NRR/DE/EMCB
Maitri Banerjee	NRR/ADPT
Stacey Resenberg	OEDO
Michael McNeil	RES/DET/MEB
Wallace Norris	RES/DET/MEB
Debbie Jackson	RES/DET/MEB
Shah Malik	RES/DET/MEB
Lee Abramson	RES/DRAA/PRAB
Rich Emch	NRR/DLPM/LPD2
Ramin Assa	NRR/DLPM/LPD2
Karen Cotton	NRR/DLPM/LPD2
L. B. Marsh	NRR/DRIP/REXB
Chuck Petrone	NRR/DRIP/REXB
Peter Wen	NRR/DRIP/RGEB
Larry Mathews	SNC/MRP
Dave Modeen	NEI
Kurt Cozens	NEI
Avtar Singh	EPRI
Allan McIlree	EPRI
Frank Ammirato	EPRI
Steve Lurie	Westinghouse
Warren Bamford	Westinghouse
Bob Sindelar	Westinghouse Savannah River Co.
Bob Hermann	SIA
Dick Wattson	SIA
Matt Golliet	Constellation Nuclear Services
Jeff Poehlar	Calvert Cliffs NPP
Gary Moffatt	SCE&G
Bob Waselus	SCE&G
T. Satan Sharma	AEP
Vaughn Wagoner	CP&L

Dean Raleigh
Masalaiko Toyoda
Yasuhiro Kotomi
Keiichi Kugimiya
Kazuo Sakai
Motohisa Fujita
Dan Salter
Ben Mays
Dick Labott
James Bennetch
Steve Hunt
David Whitaker
Robert Huston
Mann Badlani
Jim Flaherty
Nancy Chapman

Lis. Scientech
Mitsubishi Heavy Industry
Mitsubishi Heavy Industry
Mitsubishi Heavy Industry
Kansai Electric Power
Kansai Electric Power
HGP, Inc.
TXU Electric
PSE&G
Dominion
PEI
Duke Energy
LSS
NEA Technology
NEA Technology
Serch/Bechtel

Personnel attended the meeting via audio conference:

Steven Doctor
William Shack
Billy Crowley
Harold Christensen
Kerry Landis
Roger Hannah

PNNL
ANL
RII
RII
RII
RII

AGENDA FOR NRC-NEI/MRP
MEETING ON RCS HOT-LEG WELD CRACK ISSUES

Introduction and Opening Remarks	Jack Strosnider, NRC Dave Modeen, NEI
Background	Larry Mathews, MRP
Industry Thoughts on Generic Issues	Larry Mathews, MRP
Discussion	All
Summary	Jack Strosnider, NRC