

June 18, 2004

MEMORANDUM TO: John N. Hannon, Chief
Plant Systems Branch
Division of Systems Safety and Analysis
Office of Nuclear Reactor Regulation

FROM: Mark G. Kowal, Reactor Systems Engineer //RA//
Plant Systems Branch
Division of Systems Safety and Analysis
Office of Nuclear Reactor Regulation

SUBJECT: MEETING SUMMARY FOR MAY 25, 2004 MEETING BETWEEN THE
NUCLEAR REGULATORY COMMISSION STAFF AND
STAKEHOLDERS REGARDING AN OPTIONAL, RISK-INFORMED
APPROACH FOR RESOLUTION OF THE PWR SUMP BLOCKAGE
ISSUE (GSI-191) (TAC NO. MA6454)

On May 25, 2004, the Nuclear Regulatory Commission (NRC) staff met with the Nuclear Energy Institute (NEI), utility groups, and other stakeholders at NRC Headquarters concerning an alternate, risk-informed approach for resolving Generic Safety Issue (GSI) 191, "Assessment of Debris Accumulation on [Pressurized-Water Reactor] PWR Sump Performance." Attachment 1 lists the meeting attendees. A public meeting notice was issued on May 11, 2004 and was posted on the NRC's external (public) web page (ADAMS Accession No. ML041320275). Attachment 2 contains a copy of the public meeting notice.

The purpose of the meeting was to continue discussions between the staff, NEI and industry regarding a risk-informed option for resolving GSI-191, and to reach consensus on a path forward.

This was a Category 2 Meeting. At the conclusion of the business portion of the meeting, the public was invited to participate in this meeting and ask questions of the NRC staff or make comments that they feel are appropriate. The agenda contained in the published meeting notice included one designated point for stakeholder questions. However, several opportunities were offered to stakeholders for questions or comments. The agenda for the meeting consisted of (1) opening remarks and introductions, (2) NRC proposal and comments, (3) NEI/Industry proposal and comments, (4) open discussion of risk-Informed approaches, and (5) questions from stakeholders.

Attachment 3 contains the NRC staff presentation, "Public meeting with NEI and Industry - An Optional, Risk-Informed Approach For Resolution of the PWR Sump Blockage Issue (GSI-191)." Attachment 4 contains NEI's presentation, "Risk-Informed GSI-191 Resolution."

The NRC staff stated that they would consider an approach involving risk-informed exemption requests in accordance with current regulations. Licensee's could request, on a plant specific basis, exemptions from the requirement to consider the design-basis loss of coolant accident (LOCA) equivalent in size to a double ended rupture of the largest pipe in the reactor coolant

system for demonstrating long-term core cooling capability (10 CFR 50.46 (b)(5)). For such an approach, licensee's would need to perform a design basis long-term cooling evaluation and satisfy the design basis criteria for all breaks up to a new break size ("debris generation break size") that may be less than a double ended guillotine break (DEGB) of the largest pipe in the reactor coolant system. Long-term cooling must be assured for breaks between the debris generation break size and the DEGB, but the evaluation may be more realistic than a design basis evaluation, consistent with the small likelihood of the break occurring. The assurance of long-term cooling coupled with the likelihood of the break would be addressed in a risk-informed exemption request that fully meets the requirements of Regulatory Guide 1.174 (risk-informed licensing submittals) and NUREG-0800 - Standard Review Plan Sections 19 and 19.1.

NEI suggested an approach that differs from the staff's proposal in several aspects. NEI's proposal would (1) risk-inform the break location in addition the break size, (2) would not call for risk calculations (change in CDF and change in LERF), as recommended in Regulatory Guide 1.174, (3) would exclude certain large break sizes from demonstrated mitigative capability requirements, and (4) might be possible without submitting exemption requests from 10 CFR 50.46. NEI committed to providing the staff additional information, and the staff agreed to consider the NEI proposal and schedule a follow-up public meeting to continue discussions on a risk-informed approach.

Action items identified during the meeting were as follows:

NEI - Will include a discussion on their proposed risk-informed approach as part of the NEI Evaluation Guidelines submittal currently scheduled to be submitted this week (May 28).

NEI - Will provide the staff with a short write-up discussing an approach which they feel would not require use of exemption requests.

NRC - Will review and consider the NEI proposals offered in the meeting.

NRC - Will pursue another public meeting to continue discussions with NEI.

NRC - Will try to better define a schedule for the risk-informed approach, consistent with the overall GSI-191 schedule.

In closing the meeting, the NRC staff notified the participants of the NRC Public Meeting Feedback form and encouraged them to complete the form and mail it into the NRC.

- Attachments:
1. Meeting Attendees
 2. Meeting Agenda
 3. NRC Staff presentation, "Public meeting with NEI and Industry - An Optional, Risk-Informed Approach For Resolution of the PWR Sump Blockage Issue (GSI-191)."
 4. NEI Presentation, "Risk-Informed GSI-191 Resolution."

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- NEI - Will provide the staff with a short write-up discussing an approach which they feel would not require use of exemption requests.
- NRC - Will review and consider the NEI proposals offered in the meeting.
- NRC - Will pursue another public meeting to continue discussions with NEI.
- NRC - Will try to better define a schedule for the risk-informed approach, consistent with the overall GSI-191 schedule.

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 4. NEI Presentation, "Risk-Informed GSI-191 Resolution."

DISTRIBUTION: See next page

OFFICE	DSSA/SPLB	DSSA/SPLB	DSSA/SPLB
NAME	MKowal	DSolorio	JHannon
DATE	6/16/04	6/17/04	6/18/04

ADAMS Accession Nos. ML041670606 (Package)
 ML041590164 (05/25/04 Public Meeting Summary)
 ML041670625 (NEI RI GSI-191 Proposal)
 ML041670638 (Presentation Slides for 05/25/04 Public Meeting)

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OPA	
RCaruso	
BPJain	
ACRS	
PMNS	
OGC	
OIG	
WKemper	
Tmensah	
BJasinski	

LIST OF ATTENDEES
MEETING REGARDING AN OPTIONAL, RISK-INFORMED APPROACH FOR
RESOLUTION OF THE PWR SUMP BLOCKAGE ISSUE (GSI-191,
"ASSESSMENT OF DEBRIS ACCUMULATION ON PWR SUMP PERFORMANCE"
TUESDAY, MAY 25, 2004

<u>NAME</u>	<u>ORGANIZATION</u>
M. Kowal	NRC/NRR/DSSA
M. Marshall	NRC/NRR/DLPM
M. Johnson	NRC/NRR/DSSA
S. Black	NRC/NRR/DSSA
C. Grimes	NRC/NRR/DSSA
R. Architzel	NRC/NRR/DSSA
D. Solorio	NRC/NRR/DSSA
D. Harrison	NRC/NRR/DSSA
A. Lavretta	NRC/NRR/DSSA
W. Kemper	NRC/OIG
T. Y. Chang	NRC/RES/DET
R. Caruso	NRC/ACRS
M. Rubin	NRC/NRR/DSSA
J. Boska	NRC/OCM/NJD
J. Hannon	NRC/NRR/DSSA
B. Jasinski	NRC/NRR
R. Tregoning	NRC/RES/DET
T. Chan	NRC/DE/EMCB
B. Bateman	NRC/NRR/EMCB
A. Hiser	NRC/RES/MEB
M Mitchell	NRC/DE/EMCB
J. Uhle	NRC/NRR/DSSA
M. Tschiltz	NRC/NRR/DSSA
S. Dinsmore	NRC/NRR/DSSA
A. Fernandez	NRC/OGC
D. Cullison	NRC/NRR/DSSA
S. Dolley	McGraw Hill
M. Knapik	McGraw Hill
D. Lochbaum	Union of Concerned Scientists
J. Butler	Nuclear Energy Institute
A. Pietrangelo	Nuclear Energy Institute
M. Schoppman	Nuclear Energy Institute LATF
B. Jaquith	Westinghouse
B. Bryan	TVA
P. Salas	TVA
M. Kostelnik	Constellation Energy Group
M. Dinger	WCNOC/WOG
A. Ricker	Proto-Power
W. Harrison	South Texas Project
S. Levinson	AREVA
J. Walker	AREVA/Framatome ANP
B. Lutz	Westinghouse
J. Koelder	Constellation Energy Goup/CCNPP
M. Kai	Dominion Resources
A. Wyche	SERCH Licensing/Bechtel
B. Dolan	Progress Energy
D. Raleigh	Scientech

NRR = Office of Nuclear Reactor Regulation
DLPM = Division of Licensing Project Management
DSSA = Division of Systems Safety and Analysis
DRIP = Division of Regulatory Improvement Programs
RES = Office of Nuclear Regulatory Research
DET = Division of Engineering Technology
ACRS = Advisory Committee for Reactor Safeguards
OIG = Office of the Inspector General

AGENDA FOR MAY 25, 2004, PUBLIC MEETING
WITH THE NUCLEAR ENERGY INSTITUTE (NEI) REGARDING
AN OPTIONAL, RISK-INFORMED APPROACH FOR RESOLUTION OF GSI-191

<u>TOPIC</u>	<u>PRESENTER</u>	<u>TIME</u>
Opening Remarks, Introductions	NRC and NEI	1:00 P.M.
NRC Proposal/Comments	NRC	1:15 P.M.
NEI Proposal/Comments	NEI	2:00 P.M.
Open Discussion	NRC and NEI	2:45 P.M.
Questions to NRC from Stakeholders	Stakeholders and NRC	3:30 P.M.
Adjourn		4:00 P.M.

Meeting Purpose: The purpose of the meeting is to continue discussions between the staff, NEI and industry regarding a risk-informed option for resolving GSI-191, and to reach consensus on a path forward.