

May 15, 2003

MEMORANDUM TO: L. Raghavan, Chief, Section 1
Project Directorate III
Division of Licensing Project Management

FROM: John G. Lamb, Lead Project Manager, Generic Safety Issue 191 */RA/*
Project Directorate III
Division of Licensing Project Management

SUBJECT: MEETING BETWEEN THE NUCLEAR REGULATORY COMMISSION
STAFF AND STAKEHOLDERS CONCERNING GENERIC SAFETY
ISSUE 191, "ASSESSMENT OF DEBRIS ACCUMULATION ON PWR
SUMP PERFORMANCE" (TAC NO. MA6454)

The Nuclear Regulatory Commission (NRC) staff met with stakeholders at NRC Headquarters on April 29, 2003, concerning Generic Safety Issue (GSI) 191, "Assessment of Debris Accumulation on PWR [pressurized-water reactor] Sump Performance." Attachment 1 lists the meeting participants. A public meeting notice for the subject meeting was issued on November 25, 2002, and a copy of the meeting notice was posted on the NRC's external (public) web page (ADAMS Accession No. ML031070566).

This meeting was arranged at the request of the Nuclear Energy Institute (NEI) in its letter to the NRC dated April 8, 2003 (ADAMS Accession No. ML031130547). The meeting consisted of four main areas: (1) NEI and industry presentation of the outline process for determining breach size in support of local debris generation following a design-basis loss-of-coolant accident (LOCA), (2) a general discussion between NEI, industry representatives, and the NRC staff, (3) an NRC staff (Office of Nuclear Reactor Regulation/Division of Systems Safety and Analysis) presentation regarding a proposed bulletin related to GSI-191, and (4) an opportunity for public discussion.

The NEI and industry representatives presented an "Introduction to Break Area for Use in Determining Debris Generation for PWRs" (Attachment 2) and an "Introduction to Break Area for Use in Determining Debris Generation for PWRs: Technical Summary" (Attachment 3). There was a great deal of questions and discussion surrounding the technical aspects of the NEI and industry presentations. The following topics were discussed:

- fracture mechanics
- leak-before-break
- stable crack
- large-break LOCA re-definition
- risk insights
- compensatory measures

NEI and industry representatives stated that they expect the NRC staff to make a decision as soon as possible as to whether or not the NEI's process for determining breach size in support of local debris generation following a design-basis LOCA is a reasonable approach since the process is critical to NEI in the development of its guidance. The NRC staff stated it would consider a "joint option" paper between its Division of Systems Safety and Analysis and Division of Engineering and would take the information presented by NEI and industry into account.

The NRC staff presented "Proposed NRC Bulletin 2003-XX: Potential Impact of Debris Blockage on Emergency Sump Recirculation at Pressurized-Water Reactors" (Attachment 4). NEI and industry representatives stated that they would like to have another meeting with the NRC staff after the release of the proposed bulletin. The NRC staff stated it expects the proposed bulletin to be released mid- to late-May 2003.

The NRC staff informed the stakeholders that the NRC staff will be hosting the "2004 International Workshop on Debris Impact on Emergency Coolant Recirculation" along with the Nuclear Energy Agency (Attachment 5).

- Attachments:
1. Meeting Attendees
 2. "Introduction to Break Area for Use in Determining Debris Generation for PWRs"
 3. "Introduction to Break Area for Use in Determining Debris Generation for PWRs: Technical Summary"
 4. "Proposed NRC Bulletin 2003-XX: Potential Impact of Debris Blockage on Emergency Sump Recirculation at Pressurized-Water Reactors"
 5. "2004 International Workshop on Debris Impact on Emergency Coolant Recirculation"

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- ADAMS Accession No. ML031210140 (Meeting Summary)
- ADAMS Accession No. ML031360508 (Attachment 2)
- ADAMS Accession No. ML031360515 (Attachment 3)
- ADAMS Accession No. ML031360517 (Attachment 4)
- ADAMS Accession No. ML031360525 (Attachment 5)
- ADAMS Accession No. ML031360533 (Package)

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LIST OF ATTENDEES
MEETING BETWEEN THE NUCLEAR REGULATORY COMMISSION AND
STAKEHOLDERS REGARDING GENERIC SAFETY ISSUE 191, "ASSESSMENT
OF DEBRIS ACCUMULATION ON PWR SUMP PERFORMANCE"

TUESDAY, APRIL 29, 2003

<u>NAME</u>	<u>ORGANIZATION</u>
L. Raghavan	NRC/NRR/DLPM
J. Lamb	NRC/NRR/DLPM
S. Weerakkody	NRC/NRR/DSSA
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D. Terao	NRC/NRR/DE
R. Barrett	NRC/NRR/DE
M. Johnson	NRC/NRR/DIPM
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J. Butler	NEI
T. Pietrangelo	NEI
B. Bradley	NEI
T. Andreychek	Westinghouse
G. Zigler	ITS Corp.
B. Bryan	WOG/TVA
M. Dingler	Wolf Creek/WOG
G. Twachtman	McGraw Hill
D. Raleigh	Lis. Scientech
*B. Letellier	Los Alamos
*N. Chapman	Bechtel Serch Licensing

*participated via telephone

NRR = Office of Nuclear Reactor Regulation
DLPM = Division of Licensing Project Management
DSSA = Division of Systems Safety and Analysis
DE = Division of Engineering
DIPM = Division of Inspection Program Management
RES = Office of Nuclear Regulatory Research
DET = Division of Engineering Technology
NEI = Nuclear Energy Institute

ATTACHMENT 1