

June 2, 2004

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

FROM: John G. Lamb, Project Manager, Section 1 /RA/
Project Directorate III
Division of Licensing Project Management
Office of Nuclear Reactor Regulation

SUBJECT: MEETING SUMMARY BETWEEN THE NUCLEAR REGULATORY
COMMISSION STAFF AND STAKEHOLDERS ON MAY 19, 2004,
REGARDING DRAFT GENERIC LETTER 2004-XX, "POTENTIAL
IMPACT OF DEBRIS BLOCKAGE ON EMERGENCY SUMP
RECIRCULATION DURING DESIGN-BASIS ACCIDENTS AT
PRESSURIZED-WATER REACTORS"

On May 19, 2004, the Nuclear Regulatory Commission (NRC) staff met with stakeholders at NRC Headquarters concerning Draft Generic Letter 2004-XX, "Potential Impact of Debris Blockage on Emergency Sump Recirculation During Design-Basis Accidents at Pressurized-Water Reactors." Attachment 1 lists the meeting attendees. A public meeting notice was issued on April 7, 2004, and was posted on the NRC's external (public) web page (ADAMS Accession No. ML040970061). The notice included the meeting agenda.

The purpose of this meeting was to discuss the draft Generic Letter 2004-XX and answer stakeholder questions to clarify their understanding of the draft Generic Letter prior to submitting written comments within the 60-day public comment period. The draft Generic Letter is part of the NRC's effort to resolve Generic Safety Issue (GSI)191, "Assessment of Debris Accumulation on [Pressurized-Water Reactor] PWR Sump Performance." The meeting was also made available to stakeholders through the telephone conference bridge line.

This was a Category 3 Meeting. Throughout the meeting, the public was invited to participate in this meeting and ask questions of the NRC staff or make comments that they felt were appropriate.

The agenda for the meeting consisted of (1) opening remarks, (2) a brief description of the draft Generic Letter, and (3) questions from stakeholders.

Attachment 2 contains the NRC presentation, "GSI-191: Proposed Generic Letter 2004-XX."

Approximately 50 members of the public attended the meeting. Most of the public that attended the meeting were members of the Industry. There was a good exchange of information between the NRC staff and the public during the meeting. The NRC staff noted, however, that the verbal feedback does not preclude the need to submit written comments.

The questions and comments pertained to the following broad categories: (1) changing the current licensing basis, (2) backfit, (3) the Industry PWR Containment Sump Evaluation Methodology and results, (4) the dates for the Generic Letter requested information, (5) downstream effects, and (6) chemical effects.

Many of the questions and comments by the public concerned whether the draft Generic Letter was changing the licensee's current licensing basis. The NRC staff stated that the draft Generic Letter requests licensees to provide information only.

There were questions and comments by the public about whether the draft Generic Letter was requesting action and that it would be better suited as a Bulletin. The NRC staff re-stated that the draft Generic Letter requests licensees to provide information only.

There were questions and comments by the public about whether the draft Generic Letter was a backfit. The NRC staff stated that the draft Generic Letter requests information only and the draft Generic Letter requires response per 10 CFR 50.54(f) for the purpose of verifying compliance with existing applicable regulatory requirements: (a) 10 CFR 50.46(b)(5), (b) 10 CFR Part 100, (c) 10 CFR 50.67, (d) GDCs 35, 38, and 41, (e) Technical Specifications, and (f) Other plant-specific licensing basis requirements. The NRC staff stated that the information request is based on new information in compliance with existing requirements.

A few of the questions and comments by the public concerned whether the Industry PWR Containment Sump Evaluation Methodology would be approved by the NRC staff before the Generic Letter is issued. The NRC staff stated that the Generic Letter is currently scheduled to be issued by the end of August 2004, and that the approval of the Industry PWR Containment Sump Evaluation Methodology is scheduled to be completed by the end of September 2004.

Several of the questions and comments by the public concerned whether the Industry PWR Containment Sump Evaluation Methodology (1) should be performed to determine if the existing containment sump configuration complies with the current licensing basis, (2) should be performed at a refined or modified containment sump configuration, (3) results are overly conservative, and (4) should adverse results require licensees to shutdown. The NRC staff re-stated that the draft Generic Letter requests licensees to provide information only. The NRC staff also stated that licensees must follow its Technical Specifications and regulatory requirements. Questions regarding resolution of degraded and nonconforming conditions were deferred to the afternoon meeting with Nuclear Energy Institute (NEI) regarding the NEI proposal for Interim Safety Assessments concerning licensees' plant-specific sump evaluations (ADAMS Accession No. ML041250090).

The Union of Concerned Scientists questioned why there were no references in the draft Generic Letter to 10 CFR 50.72, 10 CFR 50.73, and Generic Letter 91-18, Rev. 1, "Information

to Licensees Regarding NRC Inspection Manual Section on Resolution of Degraded and Nonconforming Conditions.” The NRC staff stated it would include Generic Letter 91-18, Rev. 1, as a reference.

Several of the questions and comments by the public concerned the requested dates in the draft Generic Letter. The public commented that the 60-day response was insufficient time since the Industry PWR Containment Sump Evaluation Methodology is scheduled to be approved by the NRC 30 days after the scheduled issuance of the Generic Letter. The draft Generic Letter requests the following information no later than April 1, 2005: “A general description of and implementation schedule for all corrective actions, including any plant modifications that may be necessary to ensure compliance with the regulatory requirements listed in the Applicable Regulatory Requirements section of this Generic Letter. Provide justification for any corrective action that will not be completed by the end of the first refueling outage after April 1, 2005.” The public also commented that the April 1, 2005, date was not realistic since many outages start in April 2005.

A few of the questions and comments by the public concerned whether downstream effects would be included in the Industry PWR Containment Sump Evaluation Methodology. The NRC staff stated that it anticipates that the refinements and the supplemental guidance to the Industry PWR Containment Sump Evaluation Methodology will address the downstream effects as an engineering problem. The draft Generic Letter addresses the downstream effects with the following:

The basis for concluding that inadequate core or containment cooling would not result due to debris blockage at flow restrictions in the [emergency core cooling system] ECCS and [containment spray system] CSS flowpaths downstream of the sump screen, such as a [high pressure safety injection] HPSI throttle valve, pump bearings and seals, fuel assembly inlet debris screen, or containment spray nozzles. The discussion should consider the adequacy of the sump screen’s mesh spacing and state the basis for concluding that adverse gaps or breaches are not present on the screen surface.

A few of the questions and comments by the public concerned whether chemical effects would be included in the Industry PWR Containment Sump Evaluation Methodology. The NRC staff stated that it has ongoing research on the chemical effects and anticipates that an experiment will be completed by the end of August 2004; however, the NRC staff stated that the research effort on the chemical effects will not be completed prior to the Generic Letter issuance. The draft Generic Letter addresses the chemical effects with the following:

The maximum head loss postulated from debris accumulation on the submerged sump screen, and a description of the primary constituents of the debris bed that result in this head loss. In addition to debris generated by jet forces from the pipe rupture, debris created by the resulting containment environment (thermal and chemical) and CSS washdown should be considered in the analyses. Examples of this type of debris are disbonded coatings in the form of chips and particulates or chemical precipitants caused by chemical reactions in the pool.

Attachment 3 contains the meeting handout of the *Federal Register* Notice for the Draft Generic Letter. The NRC staff informed the stakeholders that the 60-day comment period expires

June 1, 2004. Comments after June 1, 2004, will be considered, if practical to do so, but assurance of consideration cannot be given except for comments received on or before June 1, 2004.

The NRC staff informed the stakeholders to:

1. Submit written comments to the Chief, Rules and Directives Branch, Division of Administrative Services, Office of Administration, U.S. Nuclear Regulatory Commission, Mail Stop T-5D59, Washington, DC 20555-0001,
2. Deliver written comments, if desired, to NRC Headquarters, 11545 Rockville Pike (Room T-6D59), Rockville, Maryland, between 7:30 am and 4:15 pm on Federal workdays, and
3. Cite the publication (Wednesday, March 31, 2004) and page number of the *Federal Register* (69 FR 16980).

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. "GSI-191: Proposed Generic Letter 2004-XX"
 3. *Federal Register* Notice (69 FR 16980)

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OFFICE	PDIII-1/PM	PDIII-1/LA	PDIII-1/SC
NAME	JLamb	THarris	WRuland for LRaghavan
DATE	05/28/04	05/28/04	06/02/04

ADAMS Accession Nos. ML041470442 (Meeting Summary)
 ML041550301(Attachment 2)
 ML041550293(Attachment 3)
 ML041550689(Package)

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Summary of May 19, 2004, Meeting between The Nuclear Regulatory Commission Staff and Stakeholders Regarding Draft Generic Letter 2004-XX, "Potential Impact of Debris Blockage on Emergency Sump Recirculation During Design-Basis Accidents at Pressurized-Water Reactors" concerning Generic Safety Issue 191, "Assessment of Debris Accumulation on PWR SUMP Performance."

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LIST OF ATTENDEES
MEETING REGARDING DRAFT GENERIC LETTER 2004-XX, "POTENTIAL
IMPACT OF DEBRIS BLOCKAGE ON EMERGENCY SUMP
RECIRCULATION DURING DESIGN-BASIS ACCIDENTS AT
PRESSURIZED-WATER REACTORS"
WEDNESDAY, MAY 19, 2004

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M. Johnson	NRC/NRR/DSSA
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W. Kemper	NRC/OIG
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C. Feist	TXU Energy
A. Smith	Enercon Services
M. Dingler	WCNOC/WOG
M. Kostelnik	Constellation Energy Group
J. Brown	Arizona Public Service
C.T. Bausom	Progress Energy
T. Andreychek	Westinghouse
A. Ricker	Proto-Power
J. Butler	Nuclear Energy Institute
A. Pietroangelo	Nuclear Energy Institute
T. O'Connor	Westinghouse
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W. McGow	Progress Energy
R. Brown	TVA
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S. Winter	NMC
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G. Tesfaye	CEG
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R. Oakley	Duke Energy
G. Quitoriano	PG&E

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Leland Cerra	Entergy
D. Shah	Entergy
G. Hart	PCI
B. Davenport	Exelon
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D. Lochbaum	Union of Concerned Scientists

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G. Kent	Duke Energy
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J. Walker	Framatome ANP
W. Rinkecs	Westinghouse
J. Grant	PSEG
G. Gearney	MPR
S. Dolley	McGraw-Hill
J. Enneking	GE
Deann Raleigh	LIS Scientech
K. Heffner*	Progress Energy
G. Butts*	Entergy
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B. Lanka*	Entergy
M. Rosekstris*	Entergy
N. Mosher*	Entergy
E. Rosenfeld*	State of New Jersey's Bureau of Nuclear Engineering

RR = 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
OCM = Office of the Chairman