

February 12, 2008

MEMORANDUM TO: Christiana H. Lui, Director  
Division of Risk Assessment  
Office of Nuclear Regulatory Research

FROM: Jack W. Foster, Chief */RA/*  
Operating Experience and Generic Issues Branch  
Division of Risk Assessment  
Office of Nuclear Regulatory Research

SUBJECT: GENERIC ISSUE MANAGEMENT CONTROL SYSTEM  
REPORT (FY 2008, Q1)

The enclosed Generic Issue Management Control System (GIMCS) report for the first quarter of fiscal year (FY) 2008 reflects the results of the U.S. Nuclear Regulatory Commission (NRC) staff's continued implementation of Generic Issues Program (GIP) improvements described in SECY-07-0022, "Status Report on Proposed Improvements to the Generic Issues Program," dated January 30, 2007. That paper is available in the Agencywide Documents Access and Management System (ADAMS), under Accession No. ML063460239.

During this reporting period, the GIP staff continued working with the responsible offices to ensure accurate and complete information updates for open generic issues (GIs). This interaction improved office understanding of the expectations for consistency in updates to the GIMCS, as well as the associated roles and responsibilities of the offices. The results include detailed GIMCS information updates from the responsible offices, which have been verified through the management level. The GIP staff also continued to use the Management Oversight Tracking Plan for "Quarterly GIMCS Update Input to the Office of the Executive Director for Operations (OEDO)" (ADAMS Accession No. ML080290208) to improve the process for obtaining routine GIMCS input and streamlining the process, as appropriate.

The following table summarizes the status of the open GIs and one that was closed during this reporting period. The subsequent paragraphs provide a narrative summary of the current status of these GIs. Finally, the enclosure to this memorandum provides the related GIMCS report details.

CONTACT: Asimios Malliakos, RES/DRA  
301-415-6458

Status Summary of Active Generic Issues during Q1 of FY 2008						
GI No.	Title	Current Stage	Status	Planned Closure	Months Open	Regulatory Impacts
156.6.1	Pipe Break Effects on Systems and Components	Technical Assessment	Closed	12/2007	203	None
163	Multiple Steam Generator Tube Leakage	Regulatory Office Implementation		04/2009	186	NUREG-1430, NUREG-1431, and NUREG-1432; GL 2006-01; PWR Technical Specifications
186	Potential Risk and Consequences of Heavy Load Drops in Nuclear Power Plants	Implementation and Verification	Active	08/2008	104	NUREG-1774; Standard Review Plan 9.1.5 (NUREG-0800)
189	Susceptibility of Ice Condenser and Mark III Containments to Early Failure from Hydrogen Combustion During a Severe Accident	Regulatory Office Implementation		06/2010	76	Title 10, Sections 50.34 and 50.44, of the <i>Code of Federal Regulations</i> (10 CFR 50.34 and 50.44)
191	Assessment of Debris Accumulation on PWR Sump Performance	Regulatory Office Implementation		12/2008	135	Regulatory Guide 1.82, Rev. 3; NUREG-0800; GL 1985-22; Bulletin 2003-01; GL 2004-02
193	BWR ECCS Suction Concerns	Technical Assessment	Active	06/2008	67	To Be Determined
199	Implications of Updated Probabilistic Seismic Hazard Estimates in Central and Eastern United States for Existing Plants	Screening	Active	06/2009	31	To Be Determined

### Reactor Generic Issues

**GI-156.6.1, Closed, “Pipe Break Effects on Systems and Components”** (pages 1–3 of the GIMCS report): The staff completed a technical assessment report and transmitted it to the Advisory

Committee on Reactor Safeguards (ACRS) on July 18, 2007 (ADAMS Accession No. ML071780276). The staff briefed the ACRS on this GI on September 9, 2007. In a memorandum dated September 26, 2007 (ADAMS Accession No. ML072530615) from the ACRS to the Executive Director for Operations (EDO), the Committee endorsed the staff's recommendation to close GI-156.6.1 and stated that no further actions by NRC staff or licensees are necessary with respect to this issue. On December 21, 2007, the staff issued a memorandum, from the Director of the Office of Nuclear Regulatory Research (RES) to the EDO, closing this issue (ADAMS Accession No. ML073170185).

**GI-163, Regulatory Office Implementation, Multiple Steam Generator Tube Leakage** (pages 4–7 of the GIMCS report): On September 30, 2007, the staff finished issuing revised technical specifications for all pressurized-water reactors (PWRs). The staff has completed the relevant task items defined in the Steam Generator Action Plan, with the exception of task 3.1.k. Task 3.1.k involves evaluation of the conditional probabilities of multiple tube failures for risk assessment pertaining to alternative steam generator repair criteria. The staff plans to issue a memorandum to the EDO by April 30, 2009, documenting the resolution of GI-163 and the supporting technical bases.

**GI-186, Implementation and Verification, Potential Risk and Consequences of Heavy Load Drops in Nuclear Power Plants** (pages 8–10 of the GIMCS report): On September 14, 2007, the Nuclear Energy Institute (NEI) notified the NRC that the nuclear industry had approved a formal initiative that specifies actions each plant will take to ensure that heavy load lifts continue to be conducted safely and that plant licensing bases accurately reflect plant practices. On December 13, 2007, the NRC staff participated in a public meeting with NEI to discuss implementation of the initiative and acceptance criteria for analyses of reactor vessel head drops. The staff plans to brief the ACRS on the implementation of recommendations and issue a closure memorandum to the EDO in August 2008.

**GI-189, Regulatory Office Implementation, Susceptibility of Ice Condenser and Mark III Containments to Early Failure from Hydrogen Combustion During a Severe Accident** (pages 11–15 of the GIMCS report): In late February and early March 2007, the staff received industry proposals for design modifications that incorporate security insights. On the basis of industry proposals, the staff expects nearly all affected units to complete full implementation of proposed modifications by June 2008, with two units delayed as late as early 2010 for more complex modifications. The staff expects to ultimately close this GI by June 30, 2010.

**GI-191, Regulatory Office Implementation, Assessment of Debris Accumulation on PWR Sump Performance** (pages 16–21 of the GIMCS report): Many licensees did not complete actions to address NRC Generic Letter (GL) 2004-02 by the end of 2007, primarily because the complexities associated with chemical effects make it challenging for licensees to test the adequacy of modified sump screens and for the NRC to evaluate the testing. Head loss testing to account for chemical effects is ongoing but expected to be generally complete in the first half of 2008. The staff will complete final audits of licensee corrective actions in spring 2008. Licensees will submit supplemental responses to GL 2004-02 by February 29, 2008. The staff expects to complete its review of GL responses in October 2008. The staff is also verifying, through the use of temporary inspection procedure TI-2515/166, that licensees have accomplished their committed activities related to GL 2004-02. Completion reports for TI-2515/166 are due in summer 2008. The integration of these activities to support final issue

closure, including ACRS and management reviews, should result in closure of the GI in December 2008.

**GI-193, Technical Assessment, BWR ECCS Suction Concerns** (pages 22–24 of the GIMCS report): The Boiling Water Reactor Owners Group provided references to two research reports from the Lappeenranta University of Technology laboratory in Finland which have information relative to this GI. The staff independently pursued contact with Finland through the Office of International Programs and obtained the information (ADAMS Accession Nos. ML071640273 and ML071640280). The staff's initial evaluation of the information led to the preliminary conclusion that cavitation of the emergency core cooling system (ECCS) pumps is not as great a concern as originally thought when the issue was first formulated. If more detailed examination of the applicability of the data to the plants subject to the concerns of GI-193 validates the preliminary assessment, the staff will close the issue without further action.

**GI-199, Screening, Implications of Updated Probabilistic Seismic Hazard Estimates in Central and Eastern United States for Existing Plants** (pages 25–28 of the GIMCS report): In October 2007, the staff decided that the screening analysis should consider seismic hazard data and models besides those available from the U.S. Geological Survey. The staff issued Regulatory Guide 1.208, "A Performance-Based Approach to Define the Site-Specific Earthquake Ground Motion," in March 2007, endorsing a performance-based approach. On November 15, 2007, staff from RES involved in the GI-199 initial screening analysis met with seismic hazard and analysis experts from the Office of Nuclear Reactor Regulation and the Office of New Reactors to discuss actions and identify an approach for completing the screening analysis. The staff completed the screening analysis in December 2007 and plans to reconvene the screening panel, submit the screening panel recommendation, and obtain RES Office Director approval by February 2008.

The staff closed one GI during the reporting period; thus, six reactor GIs remain to be resolved.

### ***Nonreactor Generic Issues***

At the end of the reporting period, no nonreactor GIs remain to be resolved in FY 2008.

I will continue to keep you informed of the staff's progress in resolving the remaining reactor GIs and any future GIs, as well as any major problems that may surface during their resolution.

Enclosure:  
As stated

closure, including ACRS and management reviews, should result in closure of the GI in December 2008.

**GI-193, Technical Assessment, BWR ECCS Suction Concerns** (pages 22–24 of the GIMCS report): The Boiling Water Reactor Owners Group provided references to two research reports from the Lappeenranta University of Technology laboratory in Finland which have information relative to this GI. The staff independently pursued contact with Finland through the Office of International Programs and obtained the information (ADAMS Accession Nos. ML071640273 and ML071640280). The staff's initial evaluation of the information led to the preliminary conclusion that cavitation of the emergency core cooling system (ECCS) pumps is not as great a concern as originally thought when the issue was first formulated. If more detailed examination of the applicability of the data to the plants subject to the concerns of GI-193 validates the preliminary assessment, the staff will close the issue without further action.

**GI-199, Screening, Implications of Updated Probabilistic Seismic Hazard Estimates in Central and Eastern United States for Existing Plants** (pages 25–28 of the GIMCS report): In October 2007, the staff decided that the screening analysis should consider seismic hazard data and models besides those available from the U.S. Geological Survey. The staff issued Regulatory Guide 1.208, "A Performance-Based Approach to Define the Site-Specific Earthquake Ground Motion," in March 2007, endorsing a performance-based approach. On November 15, 2007, staff from RES involved in the GI-199 initial screening analysis met with seismic hazard and analysis experts from the Office of Nuclear Reactor Regulation and the Office of New Reactors to discuss actions and identify an approach for completing the screening analysis. The staff completed the screening analysis in December 2007 and plans to reconvene the screening panel, submit the screening panel recommendation, and obtain RES Office Director approval by February 2008.

The staff closed one GI during the reporting period; thus, six reactor GIs remain to be resolved.

### ***Nonreactor Generic Issues***

At the end of the reporting period, no nonreactor GIs remain to be resolved in FY 2008.

I will continue to keep you informed of the staff's progress in resolving the remaining reactor GIs and any future GIs, as well as any major problems that may surface during their resolution.

Enclosure:  
As stated

Distribution: See following page

### **ADAMS Accession No.: ML080250043**

OFFICE	OEGIB	OEGIB	Tech Editor	SUNSI Review
NAME	AMalliakos	JFoster	PGarrity	JFoster
DATE	01/28/08	02/12/08	02/01/08 <i>via e-mail</i>	2 / 12 /08

**OFFICIAL RECORD COPY**

Distribution:

OEGIB RF

DRA RF

EDO RF

S. Duraiswamy, ACRS

F. Gillespie, ACRS

H. Vandermolen, ACRS

B. Mallett, DEDR

M. Virgilio, DEDMRT

C. Miller, FSME

A. McIntosh, FSME

M. Weber, NMSS

Y. Chen, NMSS

C. Jackson, NRO

R. Borchardt, NRO

B. Ruland, NRR

W. Bateman, NRR

J. Grobe, NRR

J. Dyer, NRR

E. Murphy, NRR

M. Ross-Lee, NRR

D. Harrison, NRR

S. Jones, NRR

M. Scott, NRR

A. Hiser, NRR

J. Golla, NRR

M. Murphy, NRR

J. Wermiel, NRR

R. Zimmerman, NSIR

S. Collins, RGN-I

V. McCree, RGN-II

J. Caldwell, RGN-III

E. Collins, RGN-IV

J. Jolicoeur, RES

M. Johnson/B. Sheron, RES

P. Kadambi, RES

F. Eltawila, RES

J. Uhle, RES

J. Monninger, RES