July 7, 2009

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FROM: Benjamin G. Beasley, Chief ***/RA/***
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SUBJECT: GENERIC ISSUE MANAGEMENT CONTROL SYSTEM REPORT (FY 2009, Q3)

Enclosed please find the Generic Issue Management Control System (GIMCS) report for the third quarter of FY 2009. For your convenience, the following table summarizes the status of the Generic Issues (GIs), and the subsequent paragraphs provide a narrative summary of the current status of these GIs. The enclosure provides the related GIMCS report details.

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Status Summary of Active Generic Issues During Q3 of FY 2009						
GI No.	**Title**	**Current Stage**	**Status**	**Planned Closure**	**Months Open**	**Regulatory Impacts**
163	Multiple Steam Generator Tube Leakage	Regulatory Office Implementation		07/2009	204	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	Verification	Active	08/2009	122	NUREG-1774; Standard Review Plan (NUREG-0800), Section 9.1.5
189	Susceptibility of Ice Condenser and Mark III Containments to Early Failure from Hydrogen Combustion During a Severe Accident	Regulatory Office Implementation		03/2010	97	Title 10, Sections 50.34 and 50.44, of the *Code of Federal Regulations* (10 CFR 50.34 and 50.44)
191	Assessment of Debris Accumulation on PWR Sump Performance	Regulatory Office Implementation		09/2010	153	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	03/2011*	85	To Be Determined
199	Implications of Updated Probabilistic Seismic Hazard Estimates in Central and Eastern United States for Existing Plants	Safety/Risk Assessment	Active	12/2009*	49	To Be Determined

Status Summary of Active Generic Issues During Q3 of FY 2009						
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* Proceed to regulatory assessment stage or close the GI.

The following three GIs—GI-163, GI-189, and GI-191—have exited the Generic Issues Program. The responsibility for their implementation and verification was transferred to the Office of Nuclear Reactor Regulation (NRR) in accordance with SECY-07-0022, "Status Report on Proposed Improvements to the Generic Issues Program," dated January 30, 2007, (ADAMS Accession No. ML063460239). Their status will continue to be tracked and reported in GIMCS until completion by the program office.

Reactor Generic Issues

GI-163, Regulatory Office Implementation, Multiple Steam Generator Tube Leakage (pages 1-3 of the GIMCS report). As of September 30, 2007, all pressurized-water reactor (PWR) licensees have modified their technical specifications in response to NRC Generic Letter 2006-01, "Steam Generator Tube Integrity and Associated Technical Specifications," and in accordance with Technical Specification Task Force (TSTF)-449. The NRC staff has completed its review of the GI and determined that no additional regulatory actions are necessary. Steam Generator Action Plan tasks relevant to resolution of GI-163 have been completed. The staff is coordinating the closure of this GI with a broader Agency review of steam generator issues. The staff has prepared a proposed resolution package, consisting of a draft memorandum to the Executive Director of Operations (EDO) with a technical report, documenting the staff's proposed closeout of this issue. NRC staff briefed the ACRS on its proposed closeout of GI-163 on May 7, 2009. The staff expects to issue a memorandum to the EDO documenting the resolution of GI-163 and the supporting technical bases on or about July 30, 2009.

GI-186, Implementation and Verification, Potential Risk and Consequences of Heavy Load Drops in Nuclear Power Plants (pages 4-6 of the GIMCS report). In April 2008, the Nuclear Energy Institute (NEI) submitted preliminary guidelines to address reactor vessel head drop consequence analyses and to establish a highly reliable handling system for reactor vessel head lifts. In July 2008, NEI submitted final industry-developed guidelines for the above specified applications and other related applications. On September 5, 2008, the NRC staff issued a safety evaluation endorsing these guidelines, with one exception regarding acceptance criteria for the consequence analysis. The staff also issued supplementary inspection guidance for refueling and other outage activities that addresses implementation of the industry initiative on control of heavy loads. This inspection guidance was posted for inspector use and public review on September 18, 2008. The NRC issued Regulatory Issue Summary 2008-28, "Endorsement of Nuclear Energy Institute Guidance for Reactor Vessel Head Heavy Load Lifts," to notify stakeholders of NRC endorsement of the guidelines in NEI 08-05. The staff plans to issue a closure memorandum to the Executive Director of Operations (EDO) in the summer of 2009.

GI-189, Regulatory Office Implementation, Susceptibility of Ice Condenser and Mark III Containments to Early Failure from Hydrogen Combustion during a Severe Accident (pages 7-10 of the GIMCS report). The NRC staff has reviewed industry proposals from licensees affected by GI-189 and has concluded that those proposed modifications will resolve GI-189 and provide benefit for some separate security scenarios which were identified during the course of the investigation. On June 15, 2007, the NRC staff issued letters to affected licensees accepting the commitments. Since that time, licensee implementation and NRC verification inspections performed pursuant to NRC Temporary Instruction (TI) 2515/174, "Hydrogen Igniter Backup Power Verification," have been completed at 8 of 9 affected sites. Implementation and verification activities at the final affected site are expected to be complete, and this issue is expected to be closed, by early 2010.

GI-191, Regulatory Office Implementation, Assessment of Debris Accumulation on PWR Sump Performance (pages 11-16 of the GIMCS report). This generic issue concerns the

possibility that, following a loss of coolant accident in a PWR, debris accumulating on the emergency core cooling system sump screen may result in clogging and restrict water flow to the pumps. As a result of this generic issue and the related generic letter, all PWR licensees committed to increase the size of their containment sump strainers (except for three plants where the modifications had already been completed). Strainer modifications are now complete at all PWRs, significantly reducing the risk of strainer clogging. An associated issue, which needs to be resolved to close GI-191, regards the potential for debris to bypass the sump strainers and enter the reactor core. In 2008, the NRC staff determined that additional industry-sponsored testing was necessary to support resolution of this issue. The testing, which is nearly complete, will result in submittal of a topical report to the NRC in mid 2009. The NRC expects to issue a safety evaluation that will provide guidance to licensees regarding use of the industry-developed test results and topical report. During 2009, the NRC will review licensee responses to NRC requests for additional information with a goal of resolving plant-specific testing and evaluation issues (with the exception of in-vessel downstream effects). Review and resolution of the remaining technical issues should support industry-wide resolution of this issue by mid 2010.

GI-193, Technical Assessment, BWR ECCS Suction Concerns (pages 17-19 of the GIMCS report). The task action plan to resolve this GI involves an evaluation of suppression pool designs, the dynamics of air entrainment in the suppression pool, and the impact on ECCS pump performance. The BWR owners group has agreed to provide additional input which will provide insights into the geometric configuration of the ECCS suction strainers in relation to the downcomers. This input, along with LOCA/ECCS pump initiation timelines, is expected later in 2009. An experimental testing program was proposed in 2009 to help assess the phenomenology involved with bubble injection and transport into the containment wetwell and ECCS suction strainers. An existing experimental facility is being modified to simulate the behavior of the voids in a BWR suppression pool. The subsequent experiments, in conjunction with the input from the BWROG, will facilitate a better understanding of the phenomenology associated with bubble injection and transport into the containment wetwell and ECCS suction strainers.

GI-199, Safety/Risk Assessment, Implications of Updated Probabilistic Seismic Hazard Estimates in Central and Eastern United States for Existing Plants (pages 20-22 of the GIMCS report). The NRC staff is collecting and analyzing seismic hazard information from the U.S. Geological Survey (USGS) and other sources and seismic risk information from Individual Plant Examination of External Events analyses. The Electric Power Research Institute (EPRI) reported that it had calculated mean seismic hazard results for all nuclear power plant sites in the central and eastern United States. With these results, EPRI is performing an independent evaluation of the implications of changes in seismic hazard estimates. The staff plans to review this information and, if it is acceptable, use this information in the GI-199 Safety/Risk Assessment. The staff expects to complete the safety/risk assessment in late 2009.

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.

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

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Enclosure:
As stated

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DATE	06/29/09	07/06/09	07/07/09

Memo to Mirela Gavrilas, et al., from Benjamin G. Beasley dated 07/07/09

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