ATTACHMENT

GENERIC ISSUE MANAGEMENT CONTROL SYSTEM REPORT

OFFICE OF NUCLEAR REGULATORY RESEARCH
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GENERIC ISSUE MANAGEMENT CONTROL SYSTEM

DESCRIPTION

The Generic Issue Management Control System (GIMCS) provides information necessary to manage the resolution of generic safety issues (GSIs) as well as non-safety-related generic issues. GSIs have the potential for safety enhancements and the promulgation of new or revised requirements or guidance. For the purpose of this management control system, resolution of a reactor GSI is defined as the point when a close-out memorandum is issued by the lead office to the EDO summarizing the staffs findings and conclusion. This conclusion can either be: (1) no new requirements; or (2) new requirements, with incorporation of the resolution into one or more of the following documents:

(a) Commission Order
(b) NRC Policy Statement
(c) Rule
(d) Standard Review Plan (SRP)
(e) Regulatory Guide
(f) Generic Letter
(g) Bulletin
(h) Information Notice

For non-safety-related reactor issues and all non-reactor issues, resolution is defined as the point when a close-out memorandum is issued by the lead office documenting the staff's findings and conclusion.

GIMCS is part of an integrated system of reports and procedures that is designed to manage GSIs through the stages of prioritization/screening and resolution (development of new criteria, management review and approval, public comments, and incorporation into the regulations, as appropriate). The priority evaluation of each issue listed as HIGH- or MEDIUM-priority in this report is contained in NUREG-0933, "A Prioritization of Generic Safety Issues." For reactor issues, the "Procedures for Identification, Prioritization, Resolution, and Tracking of Generic Issues" are outlined in RES Office Letter No. 7, dated February 16, 1996. The procedures for processing non-reactor issues are documented in NMSS Policy and Procedures Letter 1-57, Revision 1, "NMSS Generic Issues Program," dated October 1997. In 1999, Management Directive (MD) 6.4, "Generic Issues Program," was initiated for the processing of all new GSIs.

GIMCS provides the proposed schedules for managing the resolution of: (1) GSIs that have HIGH- or MEDIUM-priority designations, as determined by the procedures of NUREG-0933 and NMSS Policy and Procedures Letter 1-57; and (2) other issues designated as CONTINUE, as determined by the screening procedures of MD 6.4. Reactor GSIs ranked as either LOW or DROP are not allocated resources for resolution and, therefore, are not tracked in GIMCS.

LEGEND

ANPRM	- Advance Notice of Proposed Rulemaking
BNL	- Brookhaven National Laboratory
BTP	- Branch Technical Position
DE	- Division of Engineering
DET	- Division of Engineering Technology
DRPM	- Division of Reactor Program Management
DSSA	- Division of Systems Safety and Analysis
DTR	- Draft Technical Resolution
EPRI	- Electric Power Research Institute
FIN	- Financial Identification Number
FRN	- Federal Register Notice
FTR	- Final Technical Resolution
GL	- Generic letter
GSI	- Generic Safety Issue
H	- HIGH-priority GSI
IEB	- Inspection & Enforcement Bulletin
IN	- Information Notice
INEL	- Idaho Nuclear Engineering Laboratory
M	- MEDIUM-priority GSI
ORNL	- Oak Ridge National Laboratory
PNL	- Pacific Northwest Laboratories
PRA	- Probabilistic Risk Assessment
PRAB	- Probabilistic Risk Analysis Branch
RAI	- Request for Additional Information
RG	- Regulatory Guide
RI	- Regulatory Impact
S	- Subsumed in Another Issue (No.)
SFPO	- Spent Fuel Project Office
SOW	- Statement of Work
SRP	- Standard Review Plan
STS	- Standard Technical Specification
T/A	- Technical Assistance
TAP	- Task Action Plan
TBD	- To be Determined
TI	- Temporary Instruction
TS	- Technical Specification
USI	- Unresolved Safety Issue

DATA ELEMENTS

Management and control indicators used in GIMCS are defined as follows:

1.	Issue No.	Generic Issue Number	
2.	Title	Generic Issue Title	
3.	Identification Date	Date the issue was identified	
4.	Prioritization Date	The date that the prioritization evaluation was approved by the RES Director	
5.	Type	Generic Safety (GSI)	
6.	Priority	High (H), Medium (M), or Continue	
7.	Task Manager	Name of assigned individual responsible for resolution	
8.	Office/Division/Branch	The Office, Division, and Branch of the Task Manager who has lead responsibility for resolving the issue	
9.	Action Level	Active	Technical assistance funds appropriated for resolution and/or Task Manager actively pursuing resolution
		Inactive	No technical assistance funds appropriated for resolution, Task Manager assigned to more important work, or no Task Manager assigned
		Resolved	All necessary work has been completed and no additional resources will be expended
10.	Status	Coded summary as follows: 3A - (Resolved with requirements) 3B - (Resolved with No requirements)	
11.	TAC Number	Task Action Control (TAC) number assigned to the issue	
12.	Resolution Date	Scheduled resolution date for the issue	
13.	Work Authorization	Who or what authorized work to be done on the issue	

DATA ELEMENTS (cont.)

14.	FIN	Financial identification number assigned to contract (if any) for technical assistance
15.	Contractor	Contractor name
16.	Contract Title	Contract Title (if contract issue)
17.	Work Scope	Describes briefly the work necessary to technically resolve and complete the generic issue
18.	Status	Describes current status of work
19.	Affected Documents	Identifies documents into which the technical resolution will be incorporated
20.	Problem/Resolution	Identifies problem areas and describes what actions are necessary to resolve them
21.	Milestones	Selected significant milestones:

Original	Scheduled dates reflected in the original Task Action Plan, plus additional milestone dates added during resolution of the GSI
Current	Expected date of completion, or changes in the original scheduled dates
Actual	The date the milestone was completed

TABLE 1
REACTOR GSIs SCHEDULED FOR RESOLUTION

ISSUE NUMBER	TITLE	LEAD/OFFICE/ DIVISION/ BRANCH	PRIORITY	DATE APPROVED FOR RESOLUTION	RESOLUTION DATE AT END OF FY-2004	CURRENT RESOLUTION DATE
80	Pipe Break Effects on Control Rod Drive Hydraulic Lines in the Drywells of BWR MARK I and II Containments	RES/DSARE/ARREB	CONTINUE**	02/14/2003	TBD	12/2005
156.6.1	Pipe Break Effects on Systems and Components	RES/DSARE/ARREB	HIGH	07/16/1999	TBD	06/2006
163	Multiple Steam Generator Tube Leakage	NRR/DE/EMCB	HIGH	01/17/1997	09/2005	TBD
185	Control of Recriticality Following Small-Break LOCAs in PWRs	RES/DSARE/ARREB	HIGH	07/07/2000	09/2005	09/2005
186	Potential Risk and Consequences of Heavy Load Drops in Nuclear Power Plants	NRR/DSSA/SPLB	CONTINUE**	06/2003	TBD	03/2006
188	Steam Generator Tube Leaks/Ruptures Concurrent with Containment Bypass	RES/DET/ERAB	CONTINUE**	05/21/2001	09/2004	09/2005
189	Susceptibility of Ice Condenser and MARK III Containments to Early Failure from Hydrogen Combustion During A Severe Accident	NRR/DSSA/SPSB	CONTINUE**	02/13/2002	TBD	06/2010
191	Assessment of Debris Accumulation on PWR Sump Performance	NRR/DSSA/SPLB	HIGH*	09/--/1996	12/2007	12/2007
193	BWR ECCS Suction Concerns	RES/DSARE/ARREB	CONTINUE**	10/16/2003	TBD	03/2007
196	Boral Degradation	RES/DSARE/ARREB	CONTINUE**	10/16/2003	NA	06/2006

* Previously listed as Nearly-Resolved but changed to HIGH in SECY-98-166
** Defined in Management Directive 6.4

Total: 10

TABLE 1A
PLAN BY FISCAL YEAR FOR RESOLVING REMAINING REACTOR GSIs

PRIORITY	FY-2005	FY-2006	FY-2007	FY-2008	FY-2009	FY-2010	TBD	TOTAL
HIGH	185	156.6.1	-	191*	-	-	163	**4**
MEDIUM	-	-	-	-	-	-	-	0
CONTINUE**	188	80 186 196	193	-	-	189	-	**6**
***TOTAL*:**	**2**	**4**	**1**	**1**	**0**	**1**	**1**	**10**

* Previously listed as Nearly-Resolved but changed to HIGH in SECY-98-166
** Defined in Management Directive 6.4

TABLE 2
NUMBER OF REACTOR GSIs RESOLVED BY FISCAL YEAR
FY-1983 TO FY-2005 (3RD QUARTER)

FISCAL YEAR	USI	HIGH	MEDIUM	NR	CONTINUE	TOTAL
FY-1983	2	0	0	4	-	6
FY-1984	2	1	3	9	-	15
FY-1985	0	6	10	7	-	23
FY-1986	1	3	2	3	-	9
FY-1987	2	3	4	1	-	10
FY-1988	5	6	2	3	-	16
FY-1989	4	9	3	2	-	18
FY-1990	0	2	2	3	-	7
FY-1991	0	2	1	1	-	4
FY-1992	0	4	2	1	-	7
FY-1993	0	7	3	0	-	10
FY-1994	0	1	2	2	-	5
FY-1995	0	0	0	1	-	1
FY-1996	0	1	1	1	-	3
FY-1997	0	0	1	2	-	3
FY-1998	0	0	0	0	-	0
FY-1999	0	2	2	0	-	4
FY-2000	0	3	2	0	-	5
FY-2001	0	1	0	0	0	1
FY-2002	0	2	0	0	0	2
FY-2003	0	1	0	0	0	1

TABLE 2
NUMBER OF REACTOR GSIs RESOLVED BY FISCAL YEAR
FY-1983 TO FY-2005 (3RD QUARTER)

FISCAL YEAR	USI	HIGH	MEDIUM	NR	CONTINUE	TOTAL
FY-2004	0	0	0	0	0	0
FY-2005	0	0	0	0	0	0
TOTAL	16	54	40	40	0	150

TABLE 3
REACTOR GSIs RESOLVED BY FISCAL YEAR

ISSUE NUMBER	TITLE	PRIORITY	RESOLUTION PRODUCT	DATE APPROVED FOR RESOLUTION	DATE RESOLVED
FY-1983					
A-11	Reactor Vessel Materials Toughness	USI	GL 82-26	01/79	10/82
A-16	Steam Effects on BWR Core Spray Distribution	NR	MPA D-12	NRR-OP FY83	03/29/83
A-39	Determination of Safety Relief Valve (SRV) Pool Dynamic Loads and Temperature Limits for BWR Containment	USI	SRP Revision	01/79	10/82
B-53	Load Break Switch	NR	SRP Revision	NRR-OP FY83	07/28/83
II.E.5.1	(B&W) Design Evaluation	NR	No Req.	NRR-OP FY83	03/21/83
IV.C.1	Extend Lessons Learned from TMI toOther NRC Programs	NR	No Req.	NRR-OP FY83	04/15/83
FY-1984					
12	BWR Jet Pump Integrity	Medium	No Req.	NRR-OP FY83	09/25/84
20	Effects of Electromagnetic Pulse on Nuclear Plant Systems	NR	NUREG/CR-3069	NRR-OP FY83	11/15/83
40	Safety Concerns Associated with Breaks in the BWR Scram System	NR	MPA B-65	07/18/83	12/27/83
45	Inoperability of Instruments Due to Extreme Cold Weather	NR	SRP Revision	09/08/83	03/23/84
50	Reactor Vessel Level Instumentation in BWRs	NR	MPA F-26	07/28/83	09/06/84
69	Make-Up Nozzle Cracking in B&W Plants	NR	MPA B-43	12/06/83	09/27/84
A-1	Water Hammer	USI	SRP Revision	01/79	03/15/84
A-12	Steam Generator and Reactor Coolant Pump Supports	USI	SRP Revision	01/79	10/83
B-10	Behavior of BWR Mark III Containments	High	SRP Revision	NRR-OP FY83	09/10/84
B-26	Structural Integrity of Containment Penetrations	Medium	No Req.	NRR-OP FY83	09/27/84
B-60	Loose Parts Monitoring Systems (LPMS)	NR	GL	NRR-OP FY83	09/25/84

TABLE 3
REACTOR GSIs RESOLVED BY FISCAL YEAR

ISSUE NUMBER	TITLE	PRIORITY	RESOLUTION PRODUCT	DATE APPROVED FOR RESOLUTION	DATE RESOLVED
FY-1984 (CONT.)					
I.A.1.4	Long-Term Upgrading of Operating Personnel	NR	New Rule	NRR-OP FY83	01/01/84
II.A.1	Siting Policy Reformulation	Medium	No Req.	NRR-OP FY83	09/20/84
II.E.5.2	(B&W) Reactor Transient Response Task Force	NR	NUREG-0667	NRR-OP FY83	09/28/84
III.D.2.5	Offsite Dose Calculation Manual	NR	NUREG/CR-3332	NRR-OP FY83	01/17/84
FY-1985					
22	Inadvertent Boron Dilution Events	NR	GL 85-05	11/05/82	10/15/84
A-41	Long Term Seismic Program	Medium	No Req.	NRR-OP FY83	10/10/84
B-19	Thermal-Hydraulic Stability	NR	GL	01/03/85	05/21/85
B-54	Ice Condenser Containments	Medium	NUREG/CR-4001	NRR-OP FY83	10/22/84
B-58	Passive Mechanical Failures	Medium	No Req.	NRR-OP FY83	07/09/85
C-11	Assessment of Failure and Reliability of Pumps and Valves	Medium	No Req.	NRR-OP FY83	07/09/85
I.A.2.2	Training and Qualifications of Operating Personnel	High	Policy Statement (No Req.)	NRR-OP FY83	06/24/85
I.A.2.6(4)	Operator Workshops	Medium	No Req.	NRR-OP FY83	09/25/85
I.A.2.7	Accreditation of Training Institutions	Medium	Policy Statement (No Req.)	NRR-OP FY83	06/24/85
I.A.3.4	Licensing of Additional Operations Personnel	Medium	Policy Statement (No Req.)	NRR-OP FY83	02/12/85
I.G.2	Scope of Test Program	Medium	No Req.	NRR-OP FY83	10/05/84
II.B.6	Risk Reduction for Operating Reactors at Sites with High Population Densities	High	No Req.	NRR-OP FY83	09/25/85

TABLE 3
REACTOR GSIs RESOLVED BY FISCAL YEAR

ISSUE NUMBER	TITLE	PRIORITY	RESOLUTION PRODUCT	DATE APPROVED FOR RESOLUTION	DATE RESOLVED
FY-1985 (CONT.)					
II.B.8	Rulemaking Proceedings on Degraded Core Accidents	High	-	-	-
	(a) Hydrogen Rule		Rule/Policy Statement	NRR-OP FY83	07/19/85
	(b) Severe Accidents		Rule/Policy Statement	NRR-OP FY83	08/12/85
II.C.1	Interim Reliability Evaluation Program	High	No Req.	NRR-OP FY83	07/09/85
II.C.2	Continuation of Interim Reliability Evaluation Program	High	No Req.	NRR-OP FY83	09/25/85
II.E.2.2	Research on Small-Break LOCAs and Anomalous Transients	Medium	No Req.	NRR-OP FY83	07/25/85
III.A.1.3(2)	Maintain Supplies of Thyroid-Blocking Agent for Public	NR	Policy Statement	NRR-OP FY83	08/15/85
III.A.3.4	Nuclear Data Link	Medium	No Req.	NRR-OP FY83	06/26/85
III.D.2.3(1)	Develop Procedures to Discriminate Between Sites/Plants	NR	ESRP Revision	NRR-OP FY83	08/28/85
III.D.2.3(2)	Discriminate Between Sites and Plants that Require Consideration of Liquid Pathway Interdiction Techniques	NR	ESRP Revision	NRR-OP FY83	08/28/85
III.D.2.3(3)	Establish Feasible Method of Pathway Interdiction	NR	ESRP Revision	NRR-OP FY83	08/28/85
III.D.2.3(4)	Prepare a Summary Assessment	NR	ESRP Revision	NRR-OP FY83	08/28/85
IV.E.5	Assess Currently Operating Plants	High	No Req.	NRR-OP FY83	09/25/85
FY-1986					
3	Setpoint Drift in Instrumentation	NR	Reg Guide Rev. (No Req.)	NRR-OP FY83	05/19/86
14	PWR Pipe Cracks	NR	No Req.	NRR-OP FY83	10/04/85

TABLE 3
REACTOR GSIs RESOLVED BY FISCAL YEAR

ISSUE NUMBER	TITLE	PRIORITY	RESOLUTION PRODUCT	DATE APPROVED FOR RESOLUTION	DATE RESOLVED
FY-1986 (CONT.)					
36	Loss of Service Water	NR	SRP Revision (No Req.)	02/15/84	05/13/86
61	SRV Discharge Line Break Inside the Wetwell Airspace of BWR Mark I and II Containments	Medium	No Req.	11/30/83	08/08/86
A-43	Containment Emergency Sump Performance	USI	SRP Revision (Req.)	01/79	10/85
I.C.9	Long-Term Plan for Upgrading of Procedures	Medium	No Req.	NRR-OP FY83	06/07/85
III.D.3.1	Radiation Protection Plans	High	No Req.	NRR-OP FY83	05/19/86
HF1.2	Engineering Expertise on Shift	High	No Req.	10/01/84	10/28/85
HF1.3	Guidance on Limits and Conditions of Shift Work	High	No Req.	10/01/84	06/26/86
FY-1987					
91	Main Crankshaft Failures in Transamerica Delaval Diesel Generators	NR	NUREG-1216 (No Req.)	07/85	09/87
A-46	Seismic Qualification of Equipment in Operating Plants	USI	GL 87-02 (Req.)	02/81	02/87
A-49	Pressurized Thermal Shock	USI	Rule/Reg. Guide 1.154 (Req.)	12/81	02/87
I.A.2.6(1)	Long-Term Upgrading of Training and Qualifications - Revise Reg. Guide 1.8	High	Reg. Guide 1.8 (Req.)	10/82	05/87
I.A.3.3	Requirement for Operator Fitness	High	No Req.	12/82	01/87
I.A.4.2(1)	Research on Training Simulators	High	Reg. Guide 1.149, Rev. 1 (Req.)	10/84	05/87

TABLE 3
REACTOR GSIs RESOLVED BY FISCAL YEAR

ISSUE NUMBER	TITLE	PRIORITY	RESOLUTION PRODUCT	DATE APPROVED FOR RESOLUTION	DATE RESOLVED
FY-1987 (CONT.)					
I.B.1.1	Organization and Management Long-Term Improvements	-	-	-	
I.B.1.1(1)	Prepare Draft Criteria	Medium	No Req.	12/82	01/87
I.B.1.1(2)	Prepare Commission Paper	Medium	No Req.	12/82	01/87
I.B.1.1(3)	Issue Requirements for the Upgrading of Management and Technical Resources	Medium	No Req.	12/82	01/87
I.B.1.1(4)	Review Responses to Determine Acceptability	Medium	No Req.	12/82	01/87
FY-1988					
86	Long Range Plan for Dealing with Stress Corrosion Cracking in BWR Piping	NR	NUREG-0313, Rev. 2 GL 88-01 (Req.)	10/84	01/88
93	Steam Binding of Auxiliary Feedwater Pumps	High	GL 88-03 (No Req.)	10/84	02/88
I.D.4	Control Room Design Standard	Medium	No Req.	NRR-OP FY83	03/88
II.E.4.3	(Containment) Integrity Check	High	NUREG-1273 (No Req.)	NRR-OP FY83	03/88
B-5	Ductility of Two-Way Slabs and Shells and Buckling Behavior of Steel Containments	Medium	No Req.	NRR-OP FY83	04/88
HF8	Maintenance and Surveillance Program	High	Policy Statement (No Req.)	03/85	05/88
I.A.4.2(4)	Review Simulators for Conformance	High	Rule (Req.)	NRR-OP FY83	05/88
A-44	Station Blackout	USI	Rule/Reg. Guide 1.155 (Req.)	01/79	06/88

TABLE 3
REACTOR GSIs RESOLVED BY FISCAL YEAR

ISSUE NUMBER	TITLE	PRIORITY	RESOLUTION PRODUCT	DATE APPROVED FOR RESOLUTION	DATE RESOLVED
FY-1988 (CONT.)					
43	Reliability of Air Systems	High	GL 88-14 (Req.)	12/87	09/88
66	Steam Generator Requirements	NR	NUREG-0844 (No Req.)	11/83	09/88
102	Human Error in Events Involving Wrong Unit or Wrong Train	NR	NUREG-1192 (No Req.)	02/85	09/88
125.II.7	Reevaluate Provision to Automatically Isolate Feedwater from Steam Generator During a Line Break	High	NUREG-1332 (No Req.)	09/86	09/88
A-3,4,5	Steam Generator Tube Integrity	USI	NUREG-0844 (No Req.)	01/79	09/88
A-45	Shutdown Decay Heat Removal Requirements	USI	NUREG-1289 (No Req.)	02/81	09/88
FY-1989					
51	Proposed Requirements for Improving Reliability of Open Cycle Service Water Systems	Medium	GL 89-13 (Req.)	06/83	08/89
82	Beyond Design Bases Accidents in Spent Fuel Pools	Medium	NUREG-1353 (No Req.)	12/07/83	04/89
99	RCS/RHR Suction Line Interlocks on PWRs	High	GL 88-17 (Req.)	08/85	11/88
101	BWR Water Level Redundancy	High	GL 89-11 (Req.)	05/06/85	06/89
115	Enhancement of the Reliability of Westinghouse Solid State Protection System	High	NUREG-1341 (No Req.)	07/07/86	04/89
122.2	Initiating Feed-and-Bleed	High	No Req.	01/86	04/89
124	Auxiliary Feedwater System Reliability	NR	2 Plant-Specific Backfits (Req.)	02/86	01/89

TABLE 3
REACTOR GSIs RESOLVED BY FISCAL YEAR

ISSUE NUMBER	TITLE	PRIORITY	RESOLUTION PRODUCT	DATE APPROVED FOR RESOLUTION	DATE RESOLVED
FY-1989 (CONT.)					
125.I.3	SPDS Availability	NR	GL 89-06 (No Req.)	05/06/88	04/89
134	Rule on Degree and Experience Requirements for Senior Operators	High	Policy Statement (No Req.)	01/86	08/89
A-17	Systems Interaction	USI	NUREG-1174 (No Req.)	01/79	08/89
A-40	Seismic Design Criteria	USI	SRP Revisions (Req.)	01/79	09/89
A-47	Safety Implications of Control Systems	USI	GL 89-19 (Req.)	02/81	08/89
A-48	Hydrogen Control Measures and Effects of Hydrogen Burns on Safety Equipment	USI	Rules (Req.)	02/81	04/89
HF1.1	Shift Staffing	High	Reg. Guide 1.114, Rev.2 (Req.)	10/01/84	05/89
HF4.1	Inspection Procedure for Upgraded Emergency Operating Procedures	High	IN 86-64 (No Req.)	10/01/84	10/88
I.F.1	Expand QA List	High	No Req.	NRR-OP FY83	01/89
II.C.4	Reliability Engineering	High	No Req.	NRR-OP FY83	10/88
II.E.6.1	Test Adequacy Study	Medium	GL 89-10 (Req.)	NRR-OP FY83	06/89
FY-1990					
70	PORV and Block Valve Reliability	Medium	GL 90-06	05/14/84	06/90
75	Generic Implications of ATWS Events at the Salem Nuclear Power Plant	NR	Req.	10/19/83	05/90

TABLE 3
REACTOR GSIs RESOLVED BY FISCAL YEAR

ISSUE NUMBER	TITLE	PRIORITY	RESOLUTION PRODUCT	DATE APPROVED FOR RESOLUTION	DATE RESOLVED
FY-1990 (CONT.)					
84	CE PORVs	NR	SECY-90-232 (No Req.)	02/27/85	06/90
94	Additional Low-Temperature Overpressure Protection for LWRs	High	GL 90-06 (Req.)	07/23/85	06/90
103	Design for Probable Maximum Precipitation	NR	GL 89-22 (Req.)	09/04/85	11/89
A-29	Nuclear Power Plant Design for the Reduction of Vulnerability to Industrial Sabotage	Medium	No Req.	NRR-OP FY83	10/89
C-8	Main Steam Line Isolation Valve Leakage Control Systems	High	No Req.	NRR-OP FY83	03/90
FY-1991					
128	Electrical Power Reliability	High	GL 91-06, GL 91-11 (Req.)	11/28/86	09/91
130	Essential Service Water System Failures at Multiplant Sites	High	GL 91-13 (Req.)	03/10/87	09/91
135	Steam Generator and Steam Line Overfill	Medium	No Req.	05/27/86	03/91
II.J.4.1	Revise Deficiency Report Requirements	NR	Rule (Req.)	NRR-OP FY83	07/91
FY-1992					
29	Bolting Degradation or Failure in Nuclear Power Plants	High	No Req.	NRR-OP FY-83	10/91
73	Detached Thermal Sleeves	NR	NUREG/CR-6010 (No Req.)	08/20/91	09/92
79	Unanalyzed Reactor Vessel Thermal Stress During Natural Convection Cooldown	Medium	GL 92-02 (No Req.)	NRR-OP FY-84	05/92
87	Failure of HPCI Steam Line Without Isolation	High	No Req.	09/26/85	12/91
113	Dynamic Qualification Testing of Large Bore Hydraulic Snubbers	High	No Req.	07/02/87	08/92

TABLE 3
REACTOR GSIs RESOLVED BY FISCAL YEAR

ISSUE NUMBER	TITLE	PRIORITY	RESOLUTION PRODUCT	DATE APPROVED FOR RESOLUTION	DATE RESOLVED
FY-1992 (CONT.)					
121	Hydrogen Control for Large, Dry PWR Containments	High	No Req.	09/26/85	03/92
151	Reliability of ATWS Recirculation Pump Trip in BWRs	Medium	No Req.	08/27/91	09/92
FY-1993					
105	Interfacing Systems LOCA at LWRs	High	No Req.	06/11/85	06/93
120	On-Line Testability of Protection Systems	Medium	No Req.	11/23/90	03/93
142	Leakage Through Electrical Isolators	Medium	No Req.	06/20/90	03/93
143	Availability of Chilled Water Systems and Room Cooling	High	No Req.	03/29/91	09/93
153	Loss of Essential Service Water in LWRs	High	No Req.	03/29/91	06/93
B-56	Diesel Reliability	High	Reg Guides: 1.9, Rev. 3; 1.160 (Req.)	NRR-OP FY83	06/93
HF4.4	Guidelines for Upgrading Other Procedures	High	No Req.	10/01/84	07/93
HF5.1	Local Control Stations	High	No Req.	10/01/84	06/93
HF5.2	Review Criteria for Human Factors Aspects of Advanced Controls and Instrumentation	High	No Req.	10/01/84	06/93
I.D.3	Safety System Status Monitoring	Medium	No Req.	NRR-OP FY83	09/93
FY-1994					
57	Effects of Fire Protection System Actuation on Safety-Related Equipment	Medium	NUREG-1472 (No Req.)	06/08/88	02/94
106	Piping and Use of Highly Combustible Gases in Vital Areas	Medium	No Req.	11/03/87	11/93
I.D.5(3)	On-Line Reactor Surveillance Systems	NR	No Req.	NRR-OP FY83	11/93

TABLE 3
REACTOR GSIs RESOLVED BY FISCAL YEAR

ISSUE NUMBER	TITLE	PRIORITY	RESOLUTION PRODUCT	DATE APPROVED FOR RESOLUTION	DATE RESOLVED
FY-1994 (CONT.)					
II.H.2	Obtain Technical Data on the Conditions Inside the TMI-2 Containment Structure	High	No Req.	NRR-OP FY83	02/94
B-64	Decommissioning of Nuclear Reactors	NR	Rule (Req.)	NRR-OP FY84	09/94
FY-1995					
155.1	More Realistic Source Term Assumptions	NR	NUREG-1465 (Req.)	02/26/92	03/95
FY-1996					
15	Radiation Effects on Reactor Vessel Supports	High	NUREG-1509 (No Req.)	02/--/89	05/96
24	Automatic Emergency Core Cooling System Switch to Recirculation	Medium	No Req.	07/--/91	10/95
83	Control Room Habitability	NR	NUREG/CR-5669 (No Req.)	08/--/83	06/96
FY-1997					
78	Monitoring of Fatigue Transient Limits for Reactor Coolant System	Medium	No Req.	07/10/92	02/97
166	Adequacy of Fatigue Life of Metal Components	NR	No Req.	04/01/93	02/97
173.B	Spent Fuel Storage Pool: Permanently Shutdown Facilities	NR	No Req.	06/24/96	10/96
FY-1998					
None.					
FY-1999					
171	ESF Failure from LOOP Subsequent to a LOCA	HIGH	No Req.	06/16/95	12/98
B-61	Allowable ECCS Equipment Outage Periods	MEDIUM	No Req.	NRR OP FY-83	03/99

TABLE 3
REACTOR GSIs RESOLVED BY FISCAL YEAR

ISSUE NUMBER	TITLE	PRIORITY	RESOLUTION PRODUCT	DATE APPROVED FOR RESOLUTION	DATE RESOLVED
FY-1999 (CONT.)					
158	Performance of Safety-Related Power-Operated Valves Under Design Basis Conditions	MEDIUM	Staff Report (No Req.)	01/26/1994	08/1999
165	Spring-Actuated Safety and Relief Valve Reliability	HIGH	Staff Report (No Req.)	11/26/1993	06/1999
FY-2000					
23	Reactor Coolant Pump Seal Failures	HIGH*	Staff Report (No Req.)	NRR OP FY-83	11/1999
145	Actions to Reduce Common Cause Failures	HIGH*	Regulatory Issue Summary 99-03 (No Req.)	02/11/1992	10/1999
190	Fatigue Evaluation of Metal Components for 60-Year Plant Life	HIGH*	Staff Report (No Req.)	08/26/1996	12/1999
B-17	Criteria for Safety-Related Operator Actions	MEDIUM	Staff Report (No Req.)	03/22/1982	03/2000
B-55	Improve Reliability of Target Rock Safety Relief Valves	MEDIUM	Staff Report (No Req.)	NRR OP FY-83	12/1999
FY-2001					
170	Reactivity Transients and Fuel Damage Criteria for High Burnup Fuel	HIGH	Staff Report (No Req.)	11/09/1994	05/2001
FY-2002					
173.A	Spent Fuel Storage Pool: Operating Facilities	HIGH*	Staff Report (No Req.)	06/24/1996	12/2001

TABLE 3
REACTOR GSIs RESOLVED BY FISCAL YEAR

ISSUE NUMBER	TITLE	PRIORITY	RESOLUTION PRODUCT	DATE APPROVED FOR RESOLUTION	DATE RESOLVED
FY-2002 (CONT.)					
172	Multiple System Responses Program	HIGH*	Staff Report (No Req.)	12/07/1995	02/2002
FY-2003					
168	Environmental Qualification of Electrical Equipment	HIGH*	Staff Report (No Req.)	04/01/1993	08/14/2003

* Previously listed as Nearly-Resolved but changed to HIGH in SECY-98-166

TABLE 4

NET CHANGE BY FISCAL YEAR IN REACTOR GSIs SCHEDULED FOR RESOLUTION
FY-1983 TO FY-2005 (3RD QUARTER)

FY-1983

PRIORITY CATEGORY	START	ADDITIONS	RESOLVED	INTEGRATED	END
USI	16	0	2	0	14
HIGH	24	2	0	0	26
MEDIUM	31	2	0	0	33
NR	20	3	4	0	19
TOTAL	91	7	6	0	92

FY-1984

PRIORITY CATEGORY	START	ADDITIONS	RESOLVED	INTEGRATED	END
USI	14	0	2	0	12
HIGH	26	1	1	0	26
MEDIUM	33	4	3	0	34
NR	19	5	9	0	15
TOTAL	92	10	15	0	87

FY-1985

PRIORITY CATEGORY	START	ADDITIONS	RESOLVED	INTEGRATED	END
USI	12	0	0	0	12
HIGH	22*	41	6	0	57
MEDIUM	28*	1	10	0	19
NR	15	11	7	0	19
TOTAL	77	53	23	0	107

TABLE 4

NET CHANGE BY FISCAL YEAR IN REACTOR GSIs SCHEDULED FOR RESOLUTION
FY-1983 TO FY-2005 (3RD QUARTER)

FY-1986

PRIORITY CATEGORY	START	ADDITIONS	RESOLVED	INTEGRATED	END
USI	12	0	1	0	11
HIGH	57	<16>*	3	0	38
MEDIUM	19	7	2	0	24
NR	19	<3>*	3	0	13
TOTAL	107	<12>*	9	0	86

FY-1987

PRIORITY CATEGORY	START	ADDITIONS	RESOLVED	INTEGRATED	END
USI	11	0	2	0	9
HIGH	38	4	3	7	32
MEDIUM	24	1	4	5	16
NR	13	0	1	1	11
TOTAL	86	5	10	13	68

FY-1988

PRIORITY CATEGORY	START	ADDITIONS	RESOLVED	INTEGRATED	END
USI	9	0	5	0	4
HIGH	32	1	6	3	24
MEDIUM	16	2	2	3	13
NR	11	1	3	0	9
TOTAL	68	4	16	6	50

TABLE 4

NET CHANGE BY FISCAL YEAR IN REACTOR GSIs SCHEDULED FOR RESOLUTION FY-1983 TO FY-2005 (3RD QUARTER)

FY-1989

PRIORITY CATEGORY	START	ADDITIONS	RESOLVED	INTEGRATED	END
USI	4	0	4	0	0
HIGH	24	1	9	0	16
MEDIUM	13	1	3	1	10
NR	9	0	2	0	7
TOTAL	50	2	18	1	33

FY-1990

PRIORITY CATEGORY	START	ADDITIONS	RESOLVED	INTEGRATED	END
HIGH	16	0	2	0	14
MEDIUM	10	1	2	0	9
NR	7	0	3	0	4
TOTAL	33	1	7	0	27

FY-1991

PRIORITY CATEGORY	START	ADDITIONS	RESOLVED	INTEGRATED	END
HIGH	14	2	2	0	14
MEDIUM	9	3	1	0	11
NR	4	1	1	0	4
TOTAL	27	6	4	0	29

TABLE 4

NET CHANGE BY FISCAL YEAR IN REACTOR GSIs SCHEDULED FOR RESOLUTION FY-1983 TO FY-2005 (3RD QUARTER)

FY-1992

PRIORITY CATEGORY	START	ADDITIONS	RESOLVED	INTEGRATED	END
HIGH	14	0	4	0	10
MEDIUM	11	1	2	0	10
NR	4	2	1	0	5
TOTAL	29	3	7	0	25

FY-1993

PRIORITY CATEGORY	START	ADDITIONS	RESOLVED	INTEGRATED	END
HIGH	10	0	7	0	3
MEDIUM	10	0	3	0	7
NR	5	2	0	0	7
TOTAL	25	2	10	0	17

FY-1994

PRIORITY CATEGORY	START	ADDITIONS	RESOLVED	INTEGRATED	END
HIGH	3	1	1	0	3
MEDIUM	7	1	2	0	6
NR	7	0	2	0	5
TOTAL	17	2	5	0	14

TABLE 4

NET CHANGE BY FISCAL YEAR IN REACTOR GSIs SCHEDULED FOR RESOLUTION FY-1983 TO FY-2005 (3RD QUARTER)

FY-1995

PRIORITY CATEGORY	START	ADDITIONS	RESOLVED	INTEGRATED	END
HIGH	3	1	0	0	4
MEDIUM	6	0	0	0	6
NR	5	1	1	0	5
TOTAL	14	2	1	0	15

FY-1996

PRIORITY CATEGORY	START	ADDITIONS	RESOLVED	INTEGRATED	END
HIGH	4	0	1	0	3
MEDIUM	6	0	1	0	5
NR	5	5	1	0	9
TOTAL	15	5	3	0	17

FY-1997

PRIORITY CATEGORY	START	ADDITIONS	RESOLVED	INTEGRATED	END
HIGH	3	1	0	0	4
MEDIUM	5	0	1	0	4
NR	9	0	2	0	7
TOTAL	17	1	3	0	15

TABLE 4

NET CHANGE BY FISCAL YEAR IN REACTOR GSIs SCHEDULED FOR RESOLUTION
FY-1983 TO FY-2005 (3RD QUARTER)

FY-1998

PRIORITY CATEGORY	START	ADDITIONS	RESOLVED	INTEGRATED	END
HIGH	4	7	0	0	11
MEDIUM	4	0	0	0	4
NR	7	<7>	0	0	0
TOTAL	15	0	0	0	15

FY-1999

PRIORITY CATEGORY	START	ADDITIONS	RESOLVED	INTEGRATED	END
HIGH	11	1	2	0	10
MEDIUM	4	0	2	0	2
TOTAL	15	1	4	0	12

FY-2000

PRIORITY CATEGORY	START	ADDITIONS	RESOLVED	INTEGRATED	END
HIGH	10	1	3	0	8
MEDIUM	2	0	2	0	0
TOTAL	12	1	5	0	8

TABLE 4

NET CHANGE BY FISCAL YEAR IN REACTOR GSIs SCHEDULED FOR RESOLUTION FY-1983 TO FY-2005 (3RD QUARTER)

FY-2001

PRIORITY CATEGORY	START	ADDITIONS	RESOLVED	INTEGRATED	END
HIGH	8	0	1	0	7
MEDIUM	0	0	0	0	0
TOTAL	8	0	1	0	7

FY-2002

PRIORITY CATEGORY	START	ADDITIONS	RESOLVED	INTEGRATED	END
HIGH	7	0	2	0	5
MEDIUM	0	0	0	0	0
CONTINUE	0	2	0	0	2
TOTAL	7	2	2	0	7

FY-2003

PRIORITY CATEGORY	START	ADDITIONS	RESOLVED	INTEGRATED	END
HIGH	5	0	0	0	5
MEDIUM	0	0	0	0	0
CONTINUE	2	2	1	0	3
TOTAL	7	2	1	0	8

TABLE 4

NET CHANGE BY FISCAL YEAR IN REACTOR GSIs SCHEDULED FOR RESOLUTION
FY-1983 TO FY-2005 (3RD QUARTER)

FY-2004

PRIORITY CATEGORY	START	ADDITIONS	RESOLVED	INTEGRATED	END
HIGH	5	0	0	0	5
MEDIUM	0	0	0	0	0
CONTINUE	3	1	0	0	4
TOTAL	8	1	0	0	9

FY-2005

PRIORITY CATEGORY	START	ADDITIONS	RESOLVED	INTEGRATED	END
HIGH	5	0	0	0	5
MEDIUM	0	0	0	0	0
CONTINUE	4	1	0	0	5
TOTAL	9	1	0	0	10

TABLE 4A
NET CHANGE IN REACTOR GSIs RESOLVED
FY-1983 TO FY-2005 (3RD QUARTER)

PRIORITY CATEGORY	START	ADDITIONS	SUB-TOTAL	RESOLVED	INTEGRATED**	REMAINDER
USI	16	0	16	16	0	0
HIGH	24	44*	68	54	10	4
MEDIUM	31	18	49	40	9	0
NR	20	21*	41*	40	1	0
CONTINUE	0	6	6	0	0	6
TOTAL:	91	89	180	150	20	10

- Extensive revisions to Human Factors issues resulted in priority changes in FY-85 and FY-86.

** GSIs Integrated

FY-87 (13): Issues 48, 49, and A-30 into Issue 128
Issue 65 into Issue 23
Issues 68; 122.1.a; 122.1.b; 122.1.c; and 125.II.1.b into Issue 124
Issues I.B.1.1(6) and I.B.1.1(7) into Issue 75
Issue B-6 into Issue 119.1
Issue 67.7 into 135

FY-88 (6): Issue 77 into A-17
Issues I.D.5(5), II.B.5(1), II.B.5(2), II.B.5(3), and II.F.5 were integrated into the Research Activities Program and were reclassified as Licensing Issues.

FY-89 (1):
Issue 131 was integrated into the IPEEE Program.

TABLE 5
REACTOR GENERIC ISSUES TO BE PRIORITIZED

NONE.

TABLE 6
REACTOR GENERIC ISSUES TO BE REPRIORITIZED

NONE.

TABLE 7
REACTOR GENERIC ISSUES PRIORITIZED

ISSUE NUMBER	TITLE	IDENTIFICATION DATE	DATE PRIORITIZED	CURRENT PRIORITY
FY-1983				
31	Natural Circulation Cooldown	09/1982	07/1983	S(I.C.1)
32	Flow Blockage in Essential Equipment Caused by Corbicula	09/82	05/83	S(51)
33	Correcting Atmospheric Dump Valve Opening Upon Loss of Integrated Control System Power	09/82	08/82	S(A-47)
39	Potential for Unacceptable Interaction Between the CRD System and Non-Essential Control Air the CRD System and Non-Essential Control Air System	09/82	07/82	S(25)
40	Safety Concerns Associated with Pipe Breaks in the BWR Scram System	09/82	07/83	NR
41	BWR Scram Discharge Volume Systems	09/82	07/83	RESOLVED
42	Combination Primary/Secondary System LOCA	09/82	04/83	S(18)
45	Inoperability of Instrumentation Due to Extreme Cold Weather	09/82	09/83	NR
46	Loss of 125 Volt DC Bus	09/82	02/83	S(76)
47	Loss of Off-Site Power	09/82	04/83	RESOLVED
50	Reactor Vessel Level Instrumentation in BWRs	09/82	07/83	NR
51	Proposed Requirements for Improving the Reliability of Open Cycle Service Water Systems	09/82	06/83	MEDIUM
52	SSW Flow Blockage by Blue Mussels	09/82	05/83	S(51)
56	Abnormal Transient Operating Guidelines as Applied to a Steam Generator Overfill Event	09/82	02/83	S(A-45/I.D.1)
58	Inadvertent Containment Flooding	09/82	08/83	DROP
64	Identification of Protection System Instrument Sensing Lines	10/82	02/83	RESOLVED
65	Probability of Core-Melt Due to Component Cooling Water System Failures	02/83	07/83	HIGH
77	Flooding of Safety Equipment Compartments by Back-Flow Through Floor Drains	06/83	09/83	HIGH
79	Unanalyzed Reactor Vessel Thermal Stress During Natural Convection Cooldown	06/83	07/83	MEDIUM
D-1	Advisability of a Seismic Scram	09/1982	06/1983	LOW
IV.E.2	Plan for Early Resolution of Safety Issues	09/82	06/83	RESOLVED

TABLE 7
REACTOR GENERIC ISSUES PRIORITIZED

ISSUE NUMBER	TITLE	IDENTIFICATION DATE	DATE PRIORITIZED	CURRENT PRIORITY
FY-1984				
34	RCS Leak	09/1982	02/1984	DROP
35	Degradation of Internal Appurtenances in LWRs	09/82	02/84	LOW
36	Loss of Service Water	09/82	02/84	NR
43	Contamination of Instrument Air Lines	09/82	11/83	DROP
44	Failure of Saltwater Cooling System	09/82	10/83	S(43)
48	LCO for Class IE Vital Instrument Buses in Operating Reactors	09/82	10/83	NR
49	Interlocks and LCOs for Redundant Class IE Tie Breakers	09/82	07/84	MEDIUM
53	Consequences of a Postulated Flow Blockage Incident in a BWR	09/82	09/84	DROP
60	Lamellar Tearing of Reactor Systems Structural Supports	10/82	11/83	S(A-12)
61	SRV Line Break Inside the BWR Wetwell Airspace of Mark I and II Containments	10/82	11/83	MEDIUM
66	Steam Generator Requirements	06/83	11/83	NR
68	Postulated Loss of Auxiliary Feedwater System Resulting from Turbine-Driven Auxiliary Feedwater Pump Steam Supply Line Rupture	06/83	04/84	HIGH
69	Make-up Nozzle Cracking in B&W Plants	06/83	12/83	NR
70	PORV and Block Valve Reliability	06/83	05/84	MEDIUM
75	Generic Implications of ATWS Events at the Salem Nuclear Plant	06/83	10/83	NR
80	Pipe Break Effects on Control Rod Drive Hydrau-lic Lines in the Drywells of BWR Mark I and II Containments	06/83	01/84	LOW
82	Beyond Design Basis Accidents in Spent Fuel Pools	08/83	12/83	MEDIUM
90	Technical Specifications for Anticipatory Trips	02/84	08/84	LOW
92	Fuel Crumbling During LOCA	04/83	07/84	LOW
B-65	Iodine Spiking	09/82	06/84	DROP

TABLE 7
REACTOR GENERIC ISSUES PRIORITIZED

ISSUE NUMBER	TITLE	IDENTIFICATION DATE	DATE PRIORITIZED	CURRENT PRIORITY
FY-1985				
37	Steam Generator Overfill and Combined Primary and Secondary Blowdown	09/82	05/85	S(A-47)
54	Valve Operator-Related Events Occurring During 1978, 1979, and 1980	09/82	06/85	S(II.E.6.1)
55	Failure of Class IE Safety-Related Switchgear Circuit Breakers	09/82	03/85	DROP
59	Technical Specification Requirements for Plant Shutdown	10/82	02/85	RI
67	Steam Generator Staff Actions	06/83	03/85	MEDIUM
81	Potential Safety Problems Associated With Locked Doors and Barriers in Nuclear Power Plants	11/83	10/84	DROP
83	Control Room Habitability	11/83	06/84	NR
84	CE PORVs	11/83	02/85	NR
85	Reliability of Vacuum Breakers Connected to Steam Discharge Lines Inside BWR Containments	11/83	07/85	DROP
86	NRC Pipe Cracking Review Group Study	12/83	10/84	NR
87	Failure of HPCI Steam Line Without Isolation	01/84	09/85	HIGH
91	Transamerica Delaval Emergency Diesel Generator Main Crankshaft Failure	03/84	07/85	NR
93	Steam Binding of Auxiliary Feedwater Pumps	07/84	10/84	HIGH
94	Additional Low Temperature Overpressure Protection For Light Water Reactors	08/84	07/85	HIGH
98	CRD Accumulator Check Valve Leakage	09/84	02/85	DROP
99	RCS/RHR Suction Line Interlocks on PWRs	09/84	08/85	HIGH
101	BWR Water Level Redundancy	09/84	05/85	HIGH
102	Human Error in Events Involving Wrong Unit or Wrong Train	09/84	02/85	S(HF-02)
103	Design For Probable Maximum Precipitation	10/84	09/85	NR
105	Interfacing Systems LOCA at LWRs	10/84	06/85	HIGH
108	BWR Suppression Pool Temperature Limits	12/84	02/85	RI(LOW)
119	Piping Review Committee Recommendations	07/85	09/85	RI(NR)

TABLE 7
REACTOR GENERIC ISSUES PRIORITIZED

ISSUE NUMBER	TITLE	IDENTIFICATION DATE	DATE PRIORITIZED	CURRENT PRIORITY
FY-1985 (CONT.)				
121	Hydrogen Control For Large Dry PWR Containments	08/85	09/85	HIGH
B-50	Post Operating Basis Earthquake Inspection	02/83	04/85	RI(LOW)
B-59	N-1 Loop Operation in BWRs and PWRs	02/83	06/85	RESOLVED
HF-01	Human Factor Program Plan (HFPP with 24 subtasks)	08/83	10/84	HIGH
HF-02	Maintenance and Surveillance Program Plan (MSPP with 10 subtasks)	04/84	03/85	HIGH
FY-1986				
21	Vibration Qualification of Equipment	03/83	06/86	DROP
30	Potential Generator Missiles - Generator Rotor Retaining Rings	09/82	10/85	DROP
74	Reactor Coolant Activity Limits for Operating Reactors	06/83	05/86	DROP
97	PWR Reactor Cavity Uncontrolled Exposures	09/84	10/85	S(III.D.3.1)
111	Stress Corrosion Cracking of Pressure Boundary Ferritic Steels in Selected Environments	01/85	11/85	LI
112	Westinghouse RPS Surveillance Frequencies andOut-of-Service Times	01/85	10/85	RI(R)
114	Seismic-Induced Relay Chatter	03/85	06/86	S(A-46)
115	Reliability of Westinghouse Solid State Protection System	04/85	07/86	HIGH
122.1.a	Common Mode Failure of Isolation Valves in Closed Position	08/85	01/86	HIGH
122.1.b	Recovery of Auxiliary Feedwater	08/85	01/86	MEDIUM
122.1.c	Interruption of Auxiliary Feedwater Flow	08/85	01/86	HIGH
122.2	Initiating Feed-and-Bleed	08/85	01/86	HIGH
122.3	Physical Security System Constraints	08/85	01/86	LOW
124	Auxiliary Feedwater System Reliability	12/85	02/86	NR
125.I.2.a	PORV Reliability - Test Program	11/85	06/86	S(70)
125.I.2.b	PORV Reliability - Surveillance	11/85	06/86	S(70)

TABLE 7
REACTOR GENERIC ISSUES PRIORITIZED

ISSUE NUMBER	TITLE	IDENTIFICATION DATE	DATE PRIORITIZED	CURRENT PRIORITY
FY-1986 (CONT.)				
125.I.2.c	Auto Block Valve Closure	11/85	06/86	DROP
125.I.2.d	Equipment Qualification for Feed-and-Bleed Environment	11/85	06/86	S(A-45)
125.II.3	Review Steam/Feed Line Break Mitigation Systems for Single Failure	11/85	08/86	DROP
125.II.4	OTSG Dryout and Reflood Effects	11/85	09/86	DROP
125.II.7	Reevaluate Provisions to Automatically Isolate Feedwater from Steam Generator During Line Break	11/85	09/86	HIGH
125.II.9	Enhance Feed-and-Bleed Capability	11/85	08/86	S(A-45)
125.II.14	Remote Operation of Equipment Which Must Now be Operated Locally	11/85	08/86	LOW
133	Update Policy Statement on Nuclear Plant Staff Working Hours	07/86	07/86	LI
134	Rule on Degree and Experience Requirement	07/86	07/86	HIGH
C-4	Statistical Methods for ECCS Analysis	02/83	06/86	RI(R)
C-5	Decay Heat Update	02/83	06/86	RI(R)
C-6	LOCA Heat Sources	02/83	06/86	RI(R)
FY-1987				
113	Dynamic Qualification Testing of Large Bore Hydraulic Snubbers	03/85	07/87	HIGH
125.I.1	Availability of the STA	11/85	07/87	DROP
125.I.4	Plant-Specific Simulator	11/85	02/87	DROP
125.I.7.b	Realistic Hands-On Training	11/85	03/87	DROP
125.I.8	Procedures and Staffing for Reporting to NRC Emergency Response Center	11/85	06/87	DROP
125.II.1.a	Two-Train AFW Reliability	11/85	10/86	DROP
125.II.1.b	Review Existing AFW Systems for Single Failure	11/85	10/86	HIGH
125.II.1.c	NUREG-0737 Reliability Improvements	11/85	10/86	DROP
125.II.1.d	AFW Steam and Feedwater Rupture Control System/ICS Interactions in B&W Plants	11/85	10/86	DROP

TABLE 7
REACTOR GENERIC ISSUES PRIORITIZED

ISSUE NUMBER	TITLE	IDENTIFICATION DATE	DATE PRIORITIZED	CURRENT PRIORITY
FY- 87 (CONT.)				
125.II.2	Adequacy of Existing Maintenance Requirements for Safety-Related Systems	11/85	06/87	DROP
125.II.5	Thermal-Hydraulic Effects of Loss and Restoration of Feedwater on Primary System Components	11/85	06/87	DROP
125.II.6	Reexamine PRA Estimates of Core Damage Risk from Loss of All Feedwater	11/85	03/87	DROP
125.II.8	Reassess Criteria for Feed-and-Bleed Initiation	11/85	03/87	DROP
125.II.10	Hierarchy of Impromptu Operator Actions	11/85	02/87	DROP
125.II.12	Adequacy of Training Regarding PORV Operation	11/85	03/87	DROP
127	Testing and Maintenance of Manual Valves in Safety-Related Systems	05/86	06/87	LOW
128	Electrical Power Reliability	05/86	11/86	HIGH
130	Essential Service Water Pump Failures at Multiplant Sites	06/86	03/87	HIGH
135	Steam Generator and Steam Line Overfill	05/86	06/87	MEDIUM
FY-1988				
43*	Reliability of Air Systems	04/87	12/87	HIGH
55*	Failure of Class 1E Safety-Related Switchgear Circuit Breakers to Close on Demand	09/85	02/88	DROP
57	Effects of Fire Protection System Actuation on Safety-Related Equipment	09/82	06/88	MEDIUM
62	Reactor Systems Bolting Applications	10/82	08/88	S(29)
88	Earthquakes and Emergency Planning	01/84	10/87	RESOLVED
104	Reduction of Boron Dilution Requirements	10/84	08/88	DROP
106	Piping and Use of Highly Combustible Gases in Vital Areas	10/84	11/87	MEDIUM
125.I.3	SPDS Availability	11/85	05/88	NR
125.I.6	Valve Torque Limit and Bypass Switch Settings	11/85	12/87	DROP
125.I.7A	Recover Failed Equipment	11/85	12/87	DROP
125.II.11	Recovery of Main Feedwater as Alternative to AFW	11/85	06/88	DROP

TABLE 7
REACTOR GENERIC ISSUES PRIORITIZED

ISSUE NUMBER	TITLE	IDENTIFICATION DATE	DATE PRIORITIZED	CURRENT PRIORITY
FY-88 (CONT.)				
125.II.13	Operator Job Aids	11/85	03/88	DROP
126	Reliability of PWR Main Steam Safety Valves	03/86	03/88	LI
136	Storage and Use of Large Quantities of Cryogenic Combustibles on Site	09/86	03/88	LI
C-14	Storm Surge Model for Coastal Sites	02/83	05/88	LI(DROP)
III.D.1.1(2)	Review Information on Provisions for Leak	12/82	09/88	DROP
III.D.1.1(3)	Develop Proposed System Acceptance Criteria	12/82	09/88	DROP
FY-1989				
15*	Radiation Effects on Reactor Vessel Supports	09/88	02/89	HIGH
125.I.5	Safety Systems Tested in All Conditions Required by Design Basis Analysis	11/85	11/88	DROP
131	Potential Seismic Interaction Involving the Moveable In-Core Flux Mapping System Used in Westinghouse Plants	07/86	07/89	S(IPE)
139	Thinning of Carbon Steel Piping in LWRs	12/86	11/88	RESOLVED
B-31	Dam Failure Model	02/83	02/89	LI(DROP)
D-2	ECCS Capability for Future Plants	06/83	10/88	DROP
FY-1990				
63	Use of Equipment Not Classified as Essential to Safety in BWR Transient Analysis	10/1982	02/1990	DROP
71	Failure of Resin Demineralizer Systems and Their Effects on Nuclear Power Plant Safety	06/1983	02/1990	LOW
81*	Impact of Locked Doors and Barriers on Plant and Personnel Safety	12/1986	02/1990	DROP
95	Loss of Effective Volume for Containment Recirculation Spray	08/1984	02/1990	RESOLVED
96	RHR Suction Valve Testing	04/1984	02/1990	S(105)
107	Generic Implications of Main Transformer Failures	11/1984	02/1990	LOW
109	Reactor Vessel Closure Failure	12/1984	02/1990	DROP
116	Accident Management	04/1985	09/1990	S

TABLE 7
REACTOR GENERIC ISSUES PRIORITIZED

ISSUE NUMBER	TITLE	IDENTIFICATION DATE	DATE PRIORITIZED	CURRENT PRIORITY
FY-1990 (CONT.)				
117	Allowable Time for Diverse Simultaneous Equipment Outages	05/1985	02/1990	DROP
129	Valve Interlocks to Prevent Vessel Drainage During Shutdown Cooling	05/1986	02/1990	DROP
137	Refueling Cavity Seal Failure	10/1986	05/1990	DROP
140	Fission Product Removal Systems	03/1987	02/1990	DROP
141	LBLOCA With Consequential SGTR	04/1987	05/1990	DROP
142	Leakage Through Electrical Isolators	06/1987	06/1990	MEDIUM
B-29	Effectiveness of Ultimate Heat Sinks	02/1983	08/1990	LI(RESOLVED)
B-32	Ice Effects on Safety-Related Water Supplies	02/1983	08/1990	S(153)
FY-1991				
24	Automatic Emergency Core Cooling System Switch to Recirculation	03/83	07/91	MEDIUM
38	Potential Recirculation System Failure as a Consequence of Ingestion of Containment Paint Flakes or Other Fine Debris	09/82	08/91	DROP
72	Control Rod Drive Guide Tube Support Pin Failures	06/83	10/90	DROP
73	Detached Thermal Sleeves	06/83	08/91	NR
100	Once-Through Steam Generator Level	09/84	09/91	DROP
120	On-line Testability of Protection Systems	08/85	11/90	MEDIUM
143	Availability of Chilled Water Systems and Room Cooling	10/87	03/91	HIGH
150	Overpressurization of Containment Penetrations	04/89	08/91	DROP
151	Reliability of Anticipated Transient Without Scram Recirculation Pump Trip in BWRs	04/89	08/91	MEDIUM
153	Loss of Essential Service Water in LWRs	05/90	03/91	HIGH
A-19	Digital Computer Protection System	02/83	11/90	LI
B-22	LWR Fuel	02/83	06/91	DROP

TABLE 7
REACTOR GENERIC ISSUES PRIORITIZED

ISSUE NUMBER	TITLE	IDENTIFICATION DATE	DATE PRIORITIZED	CURRENT PRIORITY
FY-1992				
2	Failure of Protective Devices on Essential Equipment	05/83	07/92	DROP
76	Instrumentation and Control Power Interactions	06/83	04/92	DROP
78	Monitoring of Fatigue Transient Limits for Reactor Coolant System	06/83	07/92	MEDIUM
81*	Impact of Locked Doors and Barriers on Plant and Personnel Safety	08/91	04/92	LOW
89	Stiff Pipe Clamps	02/84	08/92	MEDIUM
110	Equipment Protection Devices on Engineered Safety Features	12/84	06/92	DROP
118	Tendon Anchorage Failure	07/85	01/92	RESOLVED
123	Deficiencies in the Regulations Engineered Safety Features Governing DBA and Single Failure Criterion Suggested by the Davis Besse Incident of June 9, 1985	11/85	12/91	DROP
132	RHR Pumps Inside Containment	07/86	03/92	DROP
138	Deinerting of BWRs With MARK I and II Containments During Power Operations Upon Discovery of Reactor Cooling System Leakage or a Train of a Safety System Inoperable	10/86	10/91	LOW
144	Scram Without a Turbine/Generator Trip	03/88	03/92	LOW
145	Actions to Reduce Common Cause Failures	09/88	02/92	NR
147	Fire-Induced Alternate Shutdown/Control Room Panel Interactions	04/89	08/92	LI
148	Smoke Control and Manual Fire-Fighting Effectiveness	04/89	08/92	LI
154	Adequacy of Emergency and Essential Lighting	09/90	01/92	LOW
155.1	More Realistic Source Term Assumptions	02/91	02/92	NR
155.2	Establish Licensing Requirements for Non-Operating Facilities	02/91	04/92	RI
155.4	Improve Criticality Calculations	02/91	08/92	DROP
155.5	More Realistic Severe Reactor Accident Scenario	02/91	06/92	DROP
155.6	Improve Decontamination Regulations	02/91	08/92	DROP
155.7	Improve Decommissioning Regulations	02/91	04/92	DROP

TABLE 7
REACTOR GENERIC ISSUES PRIORITIZED

ISSUE NUMBER	TITLE	IDENTIFICATION DATE	DATE PRIORITIZED	CURRENT PRIORITY
FY-1992 (CONT.)				
156.1.1	Settlement of Foundations and Buried Equipment	02/91	08/92	S(IPEEE)
156.1.2	Dam Integrity and Site Flooding	02/91	01/92	DROP
156.1.3	Site Hydrology and Ability to Withstand Floods	02/91	01/92	DROP
156.1.4	Industrial Hazards	02/91	03/92	DROP
156.1.5	Tornado Missiles	02/91	01/92	DROP
156.1.6	Turbine Missiles	02/91	10/91	DROP
156.2.1	Severe Weather Effects on Structures	02/91	01/92	DROP
156.2.2	Design Codes, Criteria, and Load Combinations	02/91	07/92	DROP
156.2.3	Containment Design and Inspection	02/91	05/92	DROP
156.2.4	Seismic Design of Structures, Systems,and Components	02/91	03/92	DROP
156.3.1.1	Shutdown Systems	02/91	03/92	DROP
156.3.1.2	Electrical Instrumentation and Control	02/91	03/92	DROP
156.3.2	Service and Cooling Water Systems	02/91	03/92	DROP
156.3.3	Ventilation Systems	02/91	09/92	DROP
156.3.4	Isolation of High and Low Pressure Systems	02/91	12/91	DROP
156.3.5	Automatic ECCS Switchover	02/91	11/91	S(24)
156.3.6.1	Emergency AC Power	02/91	02/92	S(B-56)
156.3.8	Shared Systems	02/91	06/92	DROP
156.4.1	RPS and ESFS Isolation	02/91	11/91	S(142)
156.4.2	Testing of the RPS and ESFS	02/91	03/92	S(120)
157	Containment Performance	10/91	02/92	RESOLVED

TABLE 7
REACTOR GENERIC ISSUES PRIORITIZED

ISSUE NUMBER	TITLE	IDENTIFICATION DATE	DATE PRIORITIZED	CURRENT PRIORITY
FY-1993				
146	Support Flexibility of Equipment and Components	01/89	09/93	RESOLVED
149	Adequacy of Fire Barriers	04/89	10/92	LOW
152	Design Basis for Valves That Might Be Subjected to Significant Blowdown Loads	03/90	01/93	LOW
155.3	Improve Design Requirements for Nuclear Facilities	02/91	01/93	DROP
156.3.6.2	Emergency DC Power	02/91	03/93	LOW
159	Qualification of Safety-Related Pumps While Running on Minimum Flow	10/91	09/93	DROP
160	Spurious Actions of Instrumentation Upon Restoration of Power	10/91	09/93	DROP
161	Use of Non-Safety-Related Power Supplies in Safety-Related Circuits	10/91	03/93	DROP
162	Inadequate Technical Specifications for Shared Systems at Multiplant Sites When One Unit Is Shut Down	10/91	07/93	DROP
164	Neutron Fluence in Reactor Vessel	10/92	03/93	DROP
166	Adequacy of Fatigue Life of Metal Components	04/93	04/93	NR
168	Environmental Qualification of Electrical Equipment	04/93	04/93	NR
FY-1994				
158	Performance of Power-Operated Valves Under Design Basis Conditions	09/91	01/94	MEDIUM
165	Spring-Actuated Safety and Relief Valve Reliability	10/92	11/93	HIGH
167	Hydrogen Storage Facility Separation	06/93	09/94	LOW
FY-1995				
170	Reactivity Transients and Fuel Damage Criteria for High Burn-Up Fuel	01/95	01/95	NR
171	ESF Failure from LOOP Subsequent to A LOCA	02/95	06/95	HIGH
FY-1996				
172	Multiple System Responses Program	10/89	12/95	NR
173.A	Spent Fuel Storage Pool: Operating Facilities	02/96	05/96	NR

TABLE 7
REACTOR GENERIC ISSUES PRIORITIZED

ISSUE NUMBER	TITLE	IDENTIFICATION DATE	DATE PRIORITIZED	CURRENT PRIORITY
FY-1996 (CONT.)				
173.B	Spent Fuel Storage Pool: Permanently Shutdown Facilities	02/96	05/96	NR
174.A	Fastener Gaging Practices: SONGS Employees'Concern	02/96	05/96	RESOLVED
174.B	Fastener Gaging Practices: Johnson Gage Company Concern	02/96	05/96	RESOLVED
175	Nuclear Power Plant Shift Staffing	02/96	05/96	RESOLVED
176	Loss of Fill-Oil in Rosemount Transmitters	02/96	05/96	RESOLVED
177	Vehicle Intrusion at TMI	02/96	05/96	RESOLVED
178	Effect of Hurricane Andrew on Turkey Point	05/96	05/96	LI
179	Core Performance	02/96	05/96	LI
180	Notice of Enforcement Discretion	02/96	05/96	LI (Resolved)
181	Fire Protection	02/96	05/96	LI
182	General Electric Extended Power Uprate	05/96	05/96	RI
183	Cycle-Specific Parameter Limits in Technical Specifications	02/96	05/96	RI
184	Endangered Species	05/96	05/96	EI
190	Fatigue Evaluation of Metal Components for 60-Year Plant Life	08/96	08/96	NR
191	Assessment of Debris Accumulation on PWR Sump Performance	09/96	09/96	NR
FY-1997				
163	Multiple Steam Generator Tube Leakage	06/92	01/97	HIGH
FY-1998				
169	BWR MSIV Common Mode Failure Due to Loss of Accumulator Pressure	10/93	03/98	DROP
I.F.2(1)*	QA - Assure the Independence of the Organization Performing the Checking Function	04/1997	07/1998	LOW
II.D.2*	Research on Relief and Safety Valve Test Requirements	04/1997	07/1998	DROP

TABLE 7
REACTOR GENERIC ISSUES PRIORITIZED

ISSUE NUMBER	TITLE	IDENTIFICATION DATE	DATE PRIORITIZED	CURRENT PRIORITY
FY-1999				
107*	Generic Implications of Main Transformer Failures	04/1996	03/1999	DROP
156.6.1	Pipe Break Effects on Systems and Components	02/1991	07/1999	HIGH
FY-2000				
185	Control of Recriticality Following Small-Break LOCA in PWRs	01/1999	07/2000	HIGH
FY-2001				
71*	Failure of Resin Demineralizer Systems and Their Effects on Nuclear Power Plant Safety	04/1996	12/2000	DROP
152*	Design Basis for Valves That Might Be Subjected to Significant Blowdown Loads	04/1996	04/2001	DROP

* Previous Priority Evaluation Published in NUREG-0933

TABLE 8
NUMBER OF REACTOR GSIs PRIORITIZED FROM FY-1983 TO FY-2001

ISSUE TYPE	FY-83	FY-84	FY-85	FY-86	FY-87	FY-88	FY-89	FY-90	FY-91	FY-92	FY-93	FY-94	FY-95	FY-96	FY-97	FY-98	FY-99	FY-00	FY-01	TOTAL
Issues Identified to be Prioritized	56	19	54	45*	6	3	38	3	29	7	5	1	2	17	0	0	1	0	0	286
Issues Identified to be Reprioritized	19	2	0	1	1	2	0	0	0	0	0	0	0	3	2	0	0	0	0	30
Total:	75	21	54	46	7	5	38	3	29	7	5	1	2	20	2	0	1	0	0	316
New Issues (Entered into GIMCS)																				
High	2	1	41	6	4	1	1	0	2	0	0	1	1	0	1	0	1	1	0	63
Medium	2	4	1	1	1	2	0	1	3	2	0	1	0	0	0	0	0	0	0	18
Nearly-Resolved	3	5	6	1	0	1	0	0	1	2	2	0	1	5	0	0	0	0	0	27
Sub-total:	7	10	48	8	5	4	1	1	6	4	2	2	2	5	1	0	1	1	0	108
Resolved	4	0	1	0	0	1	1	1	0	2	1	0	0	5	0	0	0	0	0	16
Low	1	4	0	2	1	0	0	2	0	4	3	1	0	0	0	1	0	0	0	19
Drop	1	4	4	6	13	9	2	8	5	24	6	0	0	0	0	2	1	0	2	87
RI/LI/EI	0	0	4	6	0	2	33	1	1	3	0	0	0	7	0	0	0	0	0	57
Integrated	8	2	3	6	0	1	1	3	0	5	0	0	0	0	0	0	0	0	0	29
Total Issues Prioritized:	21	20	60	28	19	17	38	16	12	42	12	3	2	17	1	3	2	1	2	316
[Annual Progress]/ Remaining Issues to be Prioritized or Reprioritized:	[+54	+1	-6	+18	-12	-12	0	-13	+17	-35	-7	-2	0	+3	+1	-3	-1	-1	-2]	0

TABLE 8A
NUMBER OF REACTOR GSIs SCREENED** IN ACCORDANCE WITH MD 6.4 FROM FY-1999 TO FY-2005 (2ND QUARTER)

ISSUE TYPE	FY-98	FY-99	FY-00	FY-01	FY-02	FY-03	FY-04	FY-05	TOTAL
Issues Identified to be Screened	0	2	1	1	3	1	3	1	12
Issues Identified to be Reevaluated	1*	0	0	0	0	0	0	0	1
Total:	1	2	1	1	3	1	3	1	13
New Issues (Entered Into GIMCS)									
Continue	0	0	0	1	1	2	1	1	6
Drop	0	0	0	1	1	1	1	0	4
Integrated	0	0	0	0	0	0	0	0	0
Total Issues Screened:	0	0	0	2	2	3	2	1	10
[Annual Progress]/ Remaining Issues to be Screened or Reevaluated: [	+1	+2	+1	-1	+1	-2	+1	0]	3

* Originally identified for reprioritization, but was subjected to screening

** Beginning in FY-1999, GSIs began to be screened in accordance with MD 6.4, "Generic Issues Program."

TABLE 9
REACTOR GSIs SCHEDULED FOR SCREENING IN ACCORDANCE WITH MD 6.4

ISSUE NUMBER	TITLE	LEAD OFFICE/ DIVISION/BRANCH	IDENTIFICATION DATE	CURRENT SCHEDULE
197	Iodine Spiking Phenomena	RES/DSARE/ARREB	07/2004	08/2005
198	Hydrogen Combustion in PWR Piping	RES/DSARE/ARREB	09/2004	12/2005
199	Implications of Updated Probabilistic Seismic Hazard Estimates in Central and Eastern United States	RES/DSARE/ARREB	05/2005	12/2005

TOTAL: 3

TABLE 10
REACTOR GSIs SCREENED IN ACCORDANCE WITH MD 6.4

ISSUE NUMBER	TITLE	IDENTIFICATION DATE	SCREENING COMPLETION DATE	CONCLUSION
FY-2001				
187	The Potential Impact of Postulated Cesium Concentration on Equipment Qualification in the Containment Sump	04/1999	04/2001	DROP
188	Steam Generator Tube Leaks/Ruptures Concurrent with Containment Bypass	06/2000	05/2001	CONTINUE
FY-2002				
189	Susceptibility of Ice Condenser and MARK III Containments to Early Failure from Hydrogen Combustion During a Severe Accident	05/2001	05/2002	CONTINUE
192	Secondary Containment Drawdown Time	12/2001	06/2002	DROP
FY-2003				
80*	Pipe Break Effects on Control Rod Drive Hydraulic Lines in the Drywells of BWR MARK I and II Containments	03/1998	02/2003	CONTINUE
186	Potential Risk and Consequences of Heavy Load Drops in Nuclear Power Plants	04/1999	06/2003	CONTINUE
194	Implications of Updated Probabilistic Seismic Hazard Estimates	06/2002	09/2003	DROP
FY-2004				
193	BWR ECCS Suction Concerns	05/2002	10/2003	CONTINUE
195	Hydrogen Combustion in Foreign BWR Piping	02/2003	02/2004	DROP
FY-2005				
196	Boral Degradation	11/2003	11/2004	CONTINUE

* Previous Priority Evaluation Published in NUREG-0933

TABLE 11
NON-REACTOR GENERIC ISSUES PRIORITIZED

NMSS ISSUE NUMBER	TITLE	IDENTIFICATION DATE	DATE PRIORITIZED	CURRENT PRIORITY
FY-1997				
0001	Door Interlock Failure Resulting from Faulty MicroSelectron-High Dose Rate Remote Afterloader	04/1996	02/1997	Resolved
0002	Significant Quantities of Fixed Contamination Remain in Krypton-85 Leak-Detection Devices After Venting	07/1996	10/1996	Resolved
0003	Corrosion of Sealed Sources Caused by Sensitization of Stainless Steel Source Capsules During Shipment	07/1996	10/1996	Resolved
0005	Potential for Erroneous Calibration, Dose Rate,or Radiation Exposure Measurements With Victoreen Electrometers	06/1997	06/1997	High
0006	Criticality Concerns With Unusual Moderators in Low-Level Waste	08/1997	08/1997	Medium
FY-1998				
0004	Overexposures Caused by Sources Stolen from Facility of Bankrupt Licensee	07/1996	12/1997	Resolved
0007	Criticality Benchmarks Greater Than 5% Enrichment	05/1998	06/1998	Low
0008	Year 2000 Computer Problem - Non-Reactor Licensees	05/1998	06/1998	High
0009	Amersham Radiography Source Cable Failures	05/1998	06/1998	High
0010	Troxler Gauge Source Rod Weld Failures	05/1998	06/1998	Medium
0011	Spent Fuel Dry Cask Weld Cracks	05/1998	06/1998	Medium
0012	Inadequate Transportation Packaging Puncture Tests	05/1998	06/1998	Medium
0013	Use of Different Dose Models to Demonstrate Compliance	06/1998	07/1998	Medium
0014	Surety Estimates for Groundwater Restoration at In-Situ Leach Facilities	06/1998	07/1998	Medium
0015	Adequacy of Part 150 Criticality Requirements	06/1998	07/1998	Medium
0016	Adequacy of 0.05 Weight Percent Limit in Part 40	06/1998	07/1998	Medium
FY-1999				
None.				

TABLE 11
NON-REACTOR GENERIC ISSUES PRIORITIZED

NMSS ISSUE NUMBER	TITLE	IDENTIFICATION DATE	DATE PRIORITIZED	CURRENT PRIORITY
FY-2000				
None.				
FY-2001				
0017	Misleading Marketing Information to General Licensees	07/2000	11/2000	Resolved
0018	Problems Encountered When Manually Editing Treatment Planning Data on Nucletron Microselection-HDR Model 105.999	03/1999	11/2000	Resolved
0019	Control Unit Failures of Classic Nucletron HDR Units	07/1999	11/2000	Resolved
0020	Leaking Pools	11/2000	01/2001	Drop
0021	Unlikely Events	11/2000	01/2001	Drop
0022	Gamma Stereotactic Radiosurgery	01/2001	02/2001	Drop

TABLE 12
NON-REACTOR GENERIC ISSUES TO BE SCREENED IN ACCORDANCE WITH MD 6.4

NONE.

TABLE 13
NON-REACTOR GSIs RESOLVED BY FISCAL YEAR

NMSS ISSUE NUMBER	TITLE	PRIORITY	RESOLUTION PRODUCT	DATE APPROVED FOR RESOLUTION	DATE RESOLVED
FY-1997					
0001	Door Interlock Failure Resulting from Faulty MicroSelectron-High Dose Rate Remote Afterloader	Resolved	IN 96-21	02/1997	02/1997
0002	Significant Quantities of Fixed Contamination Remain in Krypton-85 Leak-Detection Devices After Venting	Resolved	IN 96-51	10/1996	10/1996
0003	Corrosion of Sealed Sources Caused by Sensitization of Stainless Steel Source Capsules During Shipment	Resolved	IN 96-54	10/1996	10/1996
0005	Potential for Erroneous Calibration,Dose Rate or Radiation Exposure Measurements With Victoreen Electrometers	High	Bulletin 97-01	06/1997	09/1997
FY-1998					
0004	Overexposures Caused by Sources Stolen from Facility of Bankrupt Licensee	Resolved	Staff Report	12/1997	12/1997
FY-1999					
0006	Criticality Concerns With Unusual Moderators in Low-Level Waste	Medium	Staff Report	06/1997	06/1999
0009	Amersham Radiography Source Cable Failures	High	IN 97-91, Supplement 1	06/1998	10/1998
0011	Spent Fuel Dry Cask Weld Cracks	Medium	NUREG-1536	06/1998	10/1998
0012	Inadequate Transportation Packaging Puncture Tests	Medium	Staff Report	05/1998	06/1999
0013	Use of Different Dose Models to Demonstrate Compliance	Medium	Staff Report	07/1998	05/1999
FY-2000					
0008	Year 2000 Computer Problem - Nonreactor Licensees	High	Staff Report	05/1998	03/2000
0015	Adequacy of Part 150 Criticality Requirements	Medium	Staff Report	07/1998	01/2000
FY-2001					
0017	Misleading Marketing Information to General Licensees	Resolved	New Rule	07/1999	07/2000

TABLE 13
NON-REACTOR GSIs RESOLVED BY FISCAL YEAR

NMSS ISSUE NUMBER	TITLE	PRIORITY	RESOLUTION PRODUCT	DATE APPROVED FOR RESOLUTION	DATE RESOLVED
FY-2001 (Cont.)					
0018	Problems Encountered When Manually Editing Treatment Planning Data on Nucletron Microselection-HDR Model 105.999	Resolved	IN 99-09	03/1999	08/2000
0019	Control Unit Failures of Classic Nucletron HDR Units	Resolved	IN 99-23	07/1999	07/1999
FY-2002					
0010	Troxler Gauge Source Rod Weld Failures	Medium	Staff Report	05/1998	11/2001

TABLE 14
NON-REACTOR GSIs SCHEDULED FOR RESOLUTION

NMSS ISSUE NUMBER	TITLE	LEAD OFFICE/DIVISION/ BRANCH	PRIORITY	DATE APPROVED FOR RESOLUTION	RESOLUTION DATE AT END OF FY-2003	CURRENT RESOLUTION DATE
0007	Criticality Benchmarks Greater Than 5% Enrichment	NMSS/FCSS/FLIB	High	05/1998	06/2004	01/2006
0014	Surety Estimates for Groundwater Restoration at In-Situ Leach Facilities	NMSS/FCSS/FCLB	Medium	07/1998	09/2002	07/2005
0016	Adequacy of 0.05 Weight Percent Limit in Part 40	NMSS/IMNS	Medium	07/1998	12/2001	TBD

TOTAL: 3

ISSUE NUMBER: 00080 **TYPE:** GSI **OFFICE/DIVISION/BRANCH:** RES/DSARE/ARREB

TITLE: PIPE BREAK EFFECTS ON CRD HYDRAULIC LINES IN THE DRYWELLS OF BWR MARK

PRIORITY:	**ACTION LEVEL:** ACTIVE	**STATUS:** Cn
IDENT. DATE: 03/1998	**PRIORITIZATION DATE:** 00/0000	**RESOLUTION DATE:** 12/2005
ID STATUS: C	**PD STATUS:**	**RD STATUS:**
TASK MANAGER: J. IBARRA	**TAC NUMBERS:**	

WORK AUTH.: Memo to S. Collins from A. Thadani, "Generic Safety Issue 80, 'Pipe Break Effects on Control Rod Drive Hydraulic Lines in the Drywells of BWR MARK I and II Containments,'" February 14, 2003

WORK SCOPE

The objective of the TAP is to determine through analysis if: (1) a high energy pipe break inside a BWR Mark I containment has the potential to perforate the drywell shell and possibly disable accident mitigation systems; and (2) a high energy pipe break inside a BWR Mark I or Mark II containment can disable the control rod drive (CRD) scram system. The TAP is a follow-on to NUREG/CR-6395, "Enhanced Prioritization of Generic Safety Issue 156.6.1 Pipe Break Effects on Systems and Components Inside Containment," which was performed by the Idaho National Engineering and Environmental Laboratory (INEEL) and issued in November 1999, and the screening evaluation, "A Screening Evaluation of GSI-80 Pipe Break Effects on Control Rod Drive Hydraulic Lines in the Drywell of BWR Mark I and II Containments" attached to the February 14, 2003 memorandum from Thadani to Collins concerning GSI-80. Both generic issues will receive a technical assessment in accordance with Management Directive (MD) 6.4, "Generic Issues Program." The TAP need not be accomplished in sequential order, but should be accomplished in the order that appears to represent the most risk significant accident scenarios for GSIs 80 and 156.6.1. Individual TAP section reports will be issued when analysis information is obtained. All TAP sections are not required to be completed if a bounding analysis is found to be inconsequential. An integrated report will be issued in accordance with MD 6.4, combining the results of several section analyses, including draft recommendations for followup actions regarding either GSI-156.6.1 or GSI-80.

ISSUE NUMBER: 00080 **TYPE:** GSI **OFFICE/DIVISION/BRANCH:** RES/DSARE/ARREB

TITLE: PIPE BREAK EFFECTS ON CRD HYDRAULIC LINES IN THE DRYWELLS OF BWR MARK

STATUS

The Task Action Plan for the partial resolution of Generic Issues (GI) 156.6.1, "Pipe Break Effects on Systems and Components Inside Containment," and GI-80, "Pipe Break Effects on Control Rod Drive Hydraulic Lines in the Drywells of BWR Mark I and II Containments" was approved on February 3, 2004 (ML040340549). Preliminary analysis of high energy piping interactions with MARK I drywell shells and with CRD piping bundles in MARK I and II drywells indicated that there are no risk significant concerns.

A draft technical evaluation of the effects of postulated pipe breaks inside BWR Mark I and Mark II containments was completed by DET/RES in July 2004. The ANSYS finite element code was used to perform nonlinear transient analysis to determine the impact of impulsive loads due to pipe breaks in feedwater, main steam, and recirculation system piping on drywell steel shell and control rod drive (CRD) bundles. The results of the analysis indicated that the structural integrity and leak-tightness of the drywell steel shell will not be compromised due to pipe impact. The calculations indicate that: (1) the drywell steel shell will yield locally at the point of impact but will not perforate and cause an over-pressure in the annular space between the steel shell and concrete shield wall; (2) the CRD bundles will not be impacted by breaks in recirculation, steam, and feedwater system piping after a postulated break. In February 2005, DET/RES recommended that the technical assessment of the issue be documented in a Letter Report. This technical analysis portion of this report was completed in June 2005. An uncertainty analysis will be performed by DSARE/RES before the report is sent to the ACRS for review.

AFFECTED DOCUMENTS

TBD

MILESTONES	ORIGINAL DATE	CURRENT DATE	ACTUAL DATE
Decision to Integrate GSI-80 into the Technical Assessment of GSI-156.6.1	10/2003	--	10/2003
Complete Combined Task Action Plan for the Technical Assessment of GSIs 80 & 156.6.1	09/2003	--	02/2004
High Energy Piping Interactions with BWR Mark I Drywell Shells	05/2004	--	02/2004
High Energy Piping Interactions with CRD Piping Bundles in BWR Mark I Drywells	05/2004	--	04/2004
High Energy Piping Interactions with CRD Piping Bundles in BWR Mark II Drywells	06/2004	--	05/2004
Analysis and Documentation of Calculation Results	07/2004	--	07/2004

All Active Issue(s)

ISSUE NUMBER: 00080 **TYPE:** GSI **OFFICE/DIVISION/BRANCH:** RES/DSARE/ARREB

TITLE: PIPE BREAK EFFECTS ON CRD HYDRAULIC LINES IN THE DRYWELLS OF BWR MARK

MILESTONES	ORIGINAL DATE	CURRENT DATE	ACTUAL DATE
Draft Recommendations	10/2004	- -	12/2004
DSARE/RES and DET/RES Meet to Discuss Technical Assessment Report	02/2005	- -	02/2005
Draft Technical Assessment Report Completed by DET/RES	06/2005	- -	06/2005
Uncertainty Analysis Completed by DSARE/RES	08/2005	08/2005	- -
Transmit Proposed Resolution to the ACRS	02/2005	08/2005	- -
Meet with ACRS	03/2005	09/2005	- -
Close Out GSI with Memo to the EDO	06/2005	12/2005	- -

ISSUE NUMBER: 156.6.1 **TYPE:** GSI **OFFICE/DIVISION/BRANCH:** RES/DSARE/ARREB

TITLE: PIPE BREAK EFFECTS ON SYSTEMS AND COMPONENTS

PRIORITY: H **ACTION LEVEL:** ACTIVE **STATUS:**

IDENT. DATE: 02/1991 **PRIORITIZATION DATE:** 07/1999 **RESOLUTION DATE:** 06/2006

ID STATUS: C **PD STATUS:** C **RD STATUS:**

TASK MANAGER: J. IBARRA **TAC NUMBERS:**

WORK AUTH.: Memo from A. Thadani to E. Rossi dated July 16, 1999.

FIN Number	CONTRACTOR	CONTRACT TITLE
Y6406	ISL	

WORK SCOPE

The objective of the attached TAP is to determine through analysis if: (1) a high energy pipe break inside a BWR Mark I containment has the potential to perforate the drywell shell and possibly disable accident mitigation systems; and (2) a high energy pipe break inside a BWR Mark I or Mark II containment can disable the control rod drive (CRD) scram system. The TAP is a follow-on to NUREG/CR-6395, "Enhanced Prioritization of Generic Safety Issue 156.6.1 Pipe Break Effects on Systems and Components Inside Containment," which was performed by the Idaho National Engineering and Environmental Laboratory (INEEL) and issued in November 1999, and the screening evaluation, "A Screening Evaluation of GSI-80 Pipe Break Effects on Control Rod Drive Hydraulic Lines in the Drywell of BWR Mark I and II Containments" attached to the February 14, 2003 memorandum from Thadani to Collins concerning GSI-80. Both generic issues will receive a technical assessment in accordance with Management Directive (MD) 6.4, "Generic Issues Program." The TAP need not be accomplished in sequential order, but should be accomplished in the order that appears to represent the most risk significant accident scenarios for GSIs 80 and 156.6.1. Individual TAP section reports will be issued when analysis information is obtained. All TAP sections are not required to be completed if a bounding analysis is found to be inconsequential. An integrated report will be issued in accordance with MD 6.4, combining the results of several section analyses, including draft recommendations for followup actions regarding either GSIs 80 or 156.6.1.

ISSUE NUMBER: 156.6.1 **TYPE:** GSI **OFFICE/DIVISION/BRANCH:** RES/DSARE/ARREB

TITLE: PIPE BREAK EFFECTS ON SYSTEMS AND COMPONENTS

STATUS

A letter was sent from F. Eltawila (NRC) to W. Glenn Warren (BWROG) expressing concerns related to the GSI. The BWROG responded on 01-10-2001 that a committee was formed to coordinate the response to the ACRS. There are a total of 16 SEP III BWRs. A Task Action Plan for resolving the issue was approved in May 2001. The previous Task Manager (Stuart Rubin) was reassigned to the Advanced Reactors Group in REAHFB/DSARE/RES in July 2001. New Task Manager (Ron Lloyd) was assigned in January 2002.

Task 4 of Contract Y6406 (NRC-04-01-67) was issued to Information Systems Laboratories (ISL). ISL issued a draft report in September addressing many of the BWOG peer review comments on the prioritization done by INEEL (issued in 1999). The ISL report has been reviewed and comments have been made. In December 2002, ISL completed its review of technical comments made by the BWROG on the INEEL 's "Enhanced Prioritization of Generic Safety Issue 156.6.1 Pipe Break Effects on Systems and Components Inside Containment." ISL concluded that, in general, INEEL's analysis was overly conservative in its risk estimates, and simplistic in accident sequence development. A followup meeting was held on 1/15/03 to discuss potential options for resolution of differences. A meeting to discuss options was held on March 19, 2003. The ongoing reevaluation of 10 CFR 50.46, "Acceptance Criteria for Emergency Core Cooling Systems for Light-Water Nuclear Power Plants," will be considered in the technical assessment of this GSI.

The Task Action Plan for the partial resolution of GSI 156.6.1, "Pipe Break Effects on Systems and Components Inside Containment," and GSI-80, "Pipe Break Effects on Control Rod Drive Hydraulic Lines in the Drywells of BWR Mark I and II Containments" was approved on February 3, 2004 (ML040340549). RES completed a technical evaluation of the effects of postulated pipe breaks inside BWR Mark I and Mark II containments in July 2004. The ANSYS finite element code was used to perform nonlinear transient analysis to determine the impact of impulsive loads due to pipe breaks in feedwater, main steam, and recirculation system piping on drywell steel shell and control rod drive (CRD) bundles. The results of the analysis indicated that the structural integrity and leak-tightness of the drywell steel shell will not be compromised due to pipe impact. The calculations indicate that: (1) the drywell steel shell will yield locally at the point of impact but will not perforate and cause an over-pressure in the annular space between the steel shell and concrete shield wall; (2) the CRD bundles will not be impacted by breaks in recirculation, steam, and feedwater system piping after a postulated break. The next step is to confirm the staff's findings with inspections at a minimum of 3 PWR plants.

AFFECTED DOCUMENTS

To be determined.

PROBLEM / RESOLUTION

None.

MILESTONES	ORIGINAL DATE	CURRENT DATE	ACTUAL DATE
Task Action Plan Approved	05/2001	--	05/2001

ISSUE NUMBER: 156.6.1 **TYPE:** GSI **OFFICE/DIVISION/BRANCH:** RES/DSARE/ARREB

TITLE: PIPE BREAK EFFECTS ON SYSTEMS AND COMPONENTS

MILESTONES	ORIGINAL DATE	CURRENT DATE	ACTUAL DATE
Task Manager Reassigned to Other Duties	07/2001	--	07/2001
New Task Manager Assigned	01/2002	--	01/2002
Draft Contractor Report	09/2002	--	12/2002
Meeting to Discuss Options	03/2003	--	03/2003
Complete Draft Task Action Plan	11/2002	--	07/2003
Decision to Integrate GSI-80 into Technical Assessment of GSI-156.6.1	10/2003	--	10/2003
Approval of Task Action Plan	11/2003	--	02/2004
High Energy Piping Interactions with BWR Mark I Drywell Shells	03/2004	--	03/2004
Analysis and Documentation of Calculation Results	06/2004	--	07/2004
Select 3 PWRs and Complete Arrangements for Site Visits	09/2005	09/2005	--
Complete Review of Piping Configurations for 3 PWR Plants	09/2005	12/2005	--
Draft Recommendations	08/2004	12/2005	--
Meet with ACRS	02/2006	02/2006	--
Close Out Issue with Memo to the EDO	06/2006	06/2006	--

ISSUE NUMBER: 163 **TYPE:** GSI **OFFICE/DIVISION/BRANCH:** NRR/DE/EMCB

TITLE: MULTIPLE STEAM GENERATOR TUBE LEAKAGE

PRIORITY: H **ACTION LEVEL:** ACTIVE **STATUS:**

IDENT. DATE: 06/1992 **PRIORITIZATION DATE:** 01/1997 **RESOLUTION DATE:** - -

ID STATUS: C **PD STATUS:** C **RD STATUS:**

TASK MANAGER: E. MURPHY **TAC NUMBERS:**

WORK AUTH.: January 17, 1997, Memorandum from H. Thompson to D. Morrison

WORK SCOPE

This issue addresses the safety concern associated with multiple steam generator tube leaks during a main steam line break that cannot be isolated. It was opened in response to a DPV filed in late 1991. The DPV (and later DPO) issues are being considered in the staff's work on steam generator tube integrity. The NRC originally planned to develop a rule pertaining to steam generator tube integrity. The proposed rule was to implement a more flexible regulatory framework for steam generator surveillance and maintenance activities that allows a degradation-specific management approach. The regulatory analysis concluded that the more optimal regulatory approach was to utilize a generic letter. The NRC staff suggested, and the Commission subsequently approved, a revision to the regulatory approach to utilize a generic letter. Finally, in late 1998, the regulatory approach was revised once again. The staff has worked to resolve concerns with the industry initiative, NEI 97-06, in lieu of a generic letter. The current framework provides reasonable assurance that operating PWRs are safe. However, the current regulatory framework has shortcomings. To resolve these shortcomings, the staff is working with industry to revise the regulatory framework to utilize a risk-informed and performance-based approach that will ensure compliance with current regulations (i.e., GDC, Appendix B, ASME Code, 10 CFR Part 100).

The staff completed a draft risk assessment and draft regulatory analysis and met with ACRS on March 4, 5, and April 3, 1997, to discuss the two efforts. The results of these two efforts caused the staff to conclude that generic regulatory action in the form of a rule was not necessary. The staff subsequently drafted and sent to the Commission COMSECY-097-013 (05-23-1997) which discussed the basis for revising the regulatory approach to utilize a generic letter. The commission approved the revised regulatory approach in the SRM dated 06-30-1997.

ISSUE NUMBER: 163 **TYPE:** GSI **OFFICE/DIVISION/BRANCH:** NRR/DE/EMCB

TITLE: MULTIPLE STEAM GENERATOR TUBE LEAKAGE

STATUS

The DPO issues document was completed and sent to the ACRS full committee for review in October 1997. The staff met with CRGR on 06-12-1998 for an information briefing on the package. The staff met with CRGR on 07-21-1998 for a detailed review of the proposed generic letter package. The staff issued Commission Paper SECY-98-248 with the recommendation to put a hold on the issuance of a GL while the staff works with the industry on NEI 97-06 (the proposed alternative to a GL). The Commission agreed with this approach in an SRM dated 12-21-1998.

On 01-20-99, the staff issued the DPO consideration document for public comment. The DPO consideration document has been updated to reflect the status of the NEI 97-06 industry initiative and has been forwarded to the EDO. Resolution of the GSI is pending completion of the DPO process. At the request of the EDO, the ACRS served as an equivalent ad hoc panel to review the DPO issues and to provide the EDO with a summary report documenting its findings relative to the DPO issues. The ACRS met with the DPO author and other members of the NRC staff and reviewed relevant documentation relative to the DPO issues. The ACRS issued NUREG-1740 documenting its conclusions and recommendations on Feb. 1, 2001. By memo dated 03-05-2001, the EDO directed that NRR and RES develop a joint action plan by May 4,2001 (issued on May 11, 2001) to address the conclusions and recommendations in the ACRS report, which encompass the GSI-163 issues. Based on this Action Plan, the completion date for this GSI is September 2005.

This issue is an integral part of the NRC Steam Generator Action Plan, the status of which was presented to the Commission in SECY-03-0080 on May 16, 2003, and discussed at a Commission meeting on May 29, 2003. In order to resolve GSI-163, it is necessary to complete work associated with Tasks 3.1 and 3.7 through 3.9 of the SG Action Plan. Lessons learned from work competed so far has necessitated several modifications and additions to tasks, milestones, and target completion dates that are being formalized in the RCS operating plan and the SG Action Plan. For example, completion date for Task 3.5.g will be scheduled when the present work scope is expanded.

AFFECTED DOCUMENTS

MILESTONES	ORIGINAL DATE	CURRENT DATE	ACTUAL DATE
Regulatory Analysis	05/1997	--	05/1997
Proposed GL Package	06/1997	--	10/1997
ACRS Endorsement	06/1997	--	10/1997
GL Package Placed in Concurrence	10/1997	--	10/1997
NEI 97-06 Submitted	12/1997	--	12/1997

ISSUE NUMBER: 163 **TYPE:** GSI **OFFICE/DIVISION/BRANCH:** NRR/DE/EMCB

TITLE: MULTIPLE STEAM GENERATOR TUBE LEAKAGE

MILESTONES	ORIGINAL DATE	CURRENT DATE	ACTUAL DATE
GL Package Sent to CRGR by NRR	07/1997	--	04/1998
CRGR Meeting on GL Package	06/1998	--	06/1998
CRGR Meeting on Proposed GL	07/1998	--	07/1998
NRR Memo to EDO Putting GL on Hold	09/1998	--	09/1998
Commission Paper Recommending Hold on Issuance of GL	11/1998	--	10/1998
SRM on SECY-98-248	12/1998	--	12/1998
DPO Consideration Document to the EDO	09/1999	--	09/1999
EDO Establishes an Independent Panel to Review the DPO	02/2000	--	05/2000
ACRS to Perform DPO Review Panel Function	10/2000	--	10/2000
ACRS to Provide Conclusions and Recommendations	12/2000	--	02/2001
NRR & RES Issue Joint Action Plan	05/2001	--	05/2001
Completion of GSI-Related Joint Action Plan Issues	03/2005	--	--
Close Out Issue with Memo to the EDO	02/2001	--	--

ISSUE NUMBER: 185 **TYPE:** GSI **OFFICE/DIVISION/BRANCH:** RES/DSAR/ARREB

TITLE: CONTROL OF RECRITICALITY FOLLOWING SMALL-BREAK LOCA IN PWRs

PRIORITY: H **ACTION LEVEL:** ACTIVE **STATUS:**

IDENT. DATE: 01/1999 **PRIORITIZATION DATE:** 07/2000 **RESOLUTION DATE:** 09/2005

ID STATUS: C **PD STATUS:** C **RD STATUS:**

TASK MANAGER: D. BESSETTE **TAC NUMBERS:**

WORK AUTH.: Memo from F. Eltawila to A. Thadani on July 7, 2000

FIN Number	CONTRACTOR	CONTRACT TITLE
W6382	BNL	
Y6587	BNL	

WORK SCOPE

This issue addresses those SBLOCA scenarios in PWRs that involve steam generation in the core and condensation in the steam generators causing deborated water to accumulate in part of the RCS. Restart of RCS circulation may cause a recriticality event (reactivity excursion) by moving this deborated water into the core.

A Task Action Plan for resolving the issue was developed on 03-19-2001 (ML010780309). In March 2002, BNL submitted fuel enthalpy calculations for the deborated water recriticality event (ML020860192). As a result of the BNL finding of no vulnerability, milestones based on a vulnerability finding were deleted.

ISSUE NUMBER: 185 **TYPE:** GSI **OFFICE/DIVISION/BRANCH:** RES/DSAR/ARREB

TITLE: CONTROL OF RECRITICALITY FOLLOWING SMALL-BREAK LOCA IN PWRs

STATUS

On 03-25-2004, the staff issued (to NRR and ACRS) a draft report describing an assessment of recriticality from transport of boron-diluted water from loop seals to the core during small break loss-of-coolant accidents in pressurized water reactors in the United States. This report provides the assessment that was called for in the Task Action Plan for GSI-185. GSI-185 was initiated to address those small break LOCA scenarios in PWRs involving steam generation in the core and condensation in the steam generators, causing deborated water to accumulate in the loop seals. Restart of circulation was postulated to cause a recriticality event when this deborated water was transported to the core. The assessment had five components: probabilistic risk assessment; thermal hydraulic system analysis; mixing and transport analysis; core criticality analysis, and fuel behavior. A number of RES infrastructure programs were essential to resolving this generic issue. Experiments on fluid to fluid mixing conducted some years ago at the University of Maryland. Participation in the international SETH-PKL program. Use of the RELAP5/PARCS computer code. Validation of that code via comparison with calculations from the Kurchatov Institute (Russia). Participation in Cabri (France) and NSRR (Japan) fuel testing programs.

On 10-07-2004, RES presented the study "Boron Dilution Effects During Small-Break LOCAs in PWRs" to the ACRS. This study, which had been ongoing for several years, concluded that there would be no recriticality for CE and Westinghouse reactors based on relatively small loop seal volumes. Since the loop seal volume of lowered-loop B&W reactors is a factor of 10 greater, recriticality and power pulses could occur, but the scenario has very low probability with low consequence. RES is proceeding with the recommendation that the issue be closed without imposition of any new regulatory requirements for all Framatome B&W, Westinghouse, and Combustion Engineering plants.

Additional calculations assuming start of a reactor coolant pump were completed by BNL. The technical basis for closing the issue was presented to: (1) the ACRS Thermal-Hydraulic Subcommittee on June 26, 2002, September 9, 2002, and September 23, 2004; and (2) the ACRS Full Committee on October 7, 2004. The ACRS agreed with the proposed RES resolution in a letter on October 22, 2004 (ML042990017). The proposed resolution will be documented in a comprehensive NUREG report which is currently undergoing editing. Comments on the Draft NUREG were received from ACRS and NRR.

AFFECTED DOCUMENTS

None

PROBLEM / RESOLUTION

None.

MILESTONES	ORIGINAL DATE	CURRENT DATE	ACTUAL DATE
Task Action Plan Approved	03/2001	--	03/2001

ISSUE NUMBER: 185 **TYPE:** GSI **OFFICE/DIVISION/BRANCH:** RES/DSAR/ARREB

TITLE: CONTROL OF RECRITICALITY FOLLOWING SMALL-BREAK LOCA IN PWRs

MILESTONES	ORIGINAL DATE	CURRENT DATE	ACTUAL DATE
Receive BNL Calculations of Fuel Enthalpy for Deborated Water Recriticality Event	03/2002	--	03/2002
Presentation to ACRS Subcommittee	06/2002	--	06/2002
Additional Briefing of ACRS Thermal-Hydraulic Sub-Committee	09/2002	--	09/2002
Draft Technical Resolution with Recommendations	06/2002	--	03/2004
Transmit Recommendations to NRR and ACRS	11/2003	--	03/2004
Meet with ACRS SubCommittee	09/2004	--	09/2004
Meet with ACRS Full Committee	09/2004	--	10/2004
ACRS Response on Staff Recommendation	10/2004	--	10/2004
Complete Technical Assessment with Closeout Memo to the EDO	09/2005	09/2005	--
Publish NUREG	--	--	--

ISSUE NUMBER: 186 **TYPE:** GSI **OFFICE/DIVISION/BRANCH:** NRR/DSSA/SPLB

TITLE: POTENTIAL RISK AND CONSEQUENCES OF HEAVY LOAD DROPS IN NUCLEAR POWER

PRIORITY:	**ACTION LEVEL:** ACTIVE	**STATUS:** Cn
IDENT. DATE: 04/1999	**PRIORITIZATION DATE:** 00/0000	**RESOLUTION DATE:** 03/2006
ID STATUS: C	**PD STATUS:**	**RD STATUS:**
TASK MANAGER: S. JONES	**TAC NUMBERS:**	
WORK AUTH.:		

WORK SCOPE

In 1985, the staff declared, through GL 85-11, "Completion of Phase II of Control of Heavy Loads at Nuclear Power Plants, NUREG-0612," that licensees need not analyze the potential consequences of a heavy load drop. In 1986, the staff reported that USI A-36 was resolved based on the implementation of NUREG-0612, "Control of Heavy Loads at Nuclear Power Plants - Resolution of Generic Technical Activity A-36." Subsequent review of licensees' programs for the handling of heavy loads revealed that there is a substantially greater potential for severe consequences to result from the drop of a heavy load, than previously envisioned.

STATUS

The report on the potential risk and consequences of heavy load drops in nuclear power plants was completed in June 2003, after NRR comments were addressed by RES. The publication of the report, NUREG-1774, "A Survey of Crane Operating Experience at U.S. Nuclear Power Plants from 1968 Through 2002," in July 2003 completed the initial screening stage of the issue. The proposed recommendations resulting from the technical assessment of the issue were discussed with the ACRS Full Committee on September 11, 2003. Three of the RES recommendations on regulation and guidance development were sent to NRR on November 12, 2003. By letter dated February 4, 2004, NRR informed RES that these three recommendations would be implemented through issuance of a Regulatory Issue Summary that clarifies and reemphasizes existing regulatory guidance for control of heavy loads. The remaining recommendation was sent to DET/RES on November 21, 2003.

In September 2004, NRR reported that the ASME Code Committee action in support of NRC endorsement of the industry crane standard NOG-1 was delayed. The staff plans to issue a supplemental RIS to address endorsement of ASME NOG-1 Standard. In April 2005, the staff identified an emergent concern with the adequacy of evaluations of heavy load drops. To address this concern within the planned RIS, the staff has extended the planned date of issuance to September 2005.

AFFECTED DOCUMENTS

NUREG-1774

ISSUE NUMBER: 186 **TYPE:** GSI **OFFICE/DIVISION/BRANCH:** NRR/DSSA/SPLB

TITLE: POTENTIAL RISK AND CONSEQUENCES OF HEAVY LOAD DROPS IN NUCLEAR POWER

MILESTONES	ORIGINAL DATE	CURRENT DATE	ACTUAL DATE
Publish NUREG-1774	06/2003	--	06/2003
Meet with ACRS Full Committee	09/2003	--	09/2003
ACRS Memo to the EDO on Staff Recommendations	09/2003	--	09/2003
Complete Technical Assessment and Transfer Issue to NRR for Regulation and Guidance Development	10/2003	--	11/2003
DSARE/RES Memo to DET/RES Requesting Industry Code Committee Evaluation	11/2003	--	11/2003
Issue Regulatory Information Summary to Clarify and Reemphasize Existing Regulatory Guidance for Control of Heavy Loads	12/2004	09/2005	--
Brief ACRS on Implementation of Recommendations	11/2004	11/2005	--
Issue Regulatory Issue Summary to Address Endorsement of Industry Standard	02/2006	02/2006	--
Issue Closeout Memo to the EDO	08/2005	03/2006	--

ISSUE NUMBER: 188 **TYPE:** GSI **OFFICE/DIVISION/BRANCH:** RES/DET/MEB

TITLE: STEAM GENERATOR TUBE LEAKS/RUPTURES CONCURRENT WITH CONTAINMENT BYPASS

PRIORITY: **ACTION LEVEL:** ACTIVE **STATUS:**

IDENT. DATE: 06/2000 **PRIORITIZATION DATE:** 05/2001 **RESOLUTION DATE:** 09/2005

ID STATUS: C **PD STATUS:** C **RD STATUS:**

TASK MANAGER: Jim Davis **TAC NUMBERS:**

WORK AUTH.: Memorandum to A. Thadani from M. Mayfield, "Task Action Plan for Generic Safety Issue 188, 'Steam Generator Tube Leaks or Ruptures Concurrent with Containment Bypass from Main Steam Line or Feedwater Line Breaches,'" March 28, 2002

WORK SCOPE

This issue addresses the effects on the validity of steam generator tube leak and rupture analyses of resonance vibrations in steam generator tubes, during steam line break depressurization. Thermal-Hydraulic loads were transferred to Argonne National Laboratory (ANL) for their use in estimating the upper bound loads, cycles, and displacements on tube support plates and tubes. This work was completed. ANL was also contracted to: (1) estimate the amount of crack growth on degraded tubes, using the bounding loads plus the pressure stresses; (2) estimate the margins for crack growth during normal and accident conditions; and (3) determine if more refined thermal-hydraulic analyses will be required to obtain the forces and displacements that may result from a main steam line break. This issue is an integral part of the NRC Steam Generator Action Plan, the status of which was presented to the Commission in SECY-03-0080 on 05-16-2003, and discussed at a Commission meeting on 05-29-2003.

STATUS

In July 2004, a draft study was completed which showed that, even if a few percent of steam generator tubes are locked to the tube support plates by crevice deposits or corrosion products, the dynamic loads associated with an MSLB will have little impact on the integrity of the tubes, unless extensive circumferential cracking is present. This study will be issued by the staff as a NUREG report.

MILESTONES	ORIGINAL DATE	CURRENT DATE	ACTUAL DATE
Develop Task Action Plan	03/2002	--	03/2002
SECY-03-0080 Presented to Commission	05/2003	--	05/2003
Commission Meeting	05/2003	--	05/2003
Complete Estimate of the Margins for Crack Propagation for a Range of Crack Sizes for Main Steam Line Break-Type Loads	03/2003	--	06/2003
Determine the Impact of GSI-188 on GSI-163	09/2003	--	06/2003

ISSUE NUMBER: 188 **TYPE:** GSI **OFFICE/DIVISION/BRANCH:** RES/DET/MEB

TITLE: STEAM GENERATOR TUBE LEAKS/RUPTURES CONCURRENT WITH CONTAINMENT BYPASS

MILESTONES	ORIGINAL DATE	CURRENT DATE	ACTUAL DATE
Conduct Tests of the Degraded SG Tubes Under Pressure and with Axial and Bending Loads	09/2003	--	06/2003
Complete Draft Study and Circulate for Comments	07/2004	--	07/2004
Transmit NUREG Report to ACRS for Review	10/2004	--	07/2005
Complete Technical Assessment with Closeout Memo to the EDO	09/2004	09/2005	--
Publish NUREG Report	12/2004	09/2005	--

ISSUE NUMBER: 189 **TYPE:** GSI **OFFICE/DIVISION/BRANCH:** NRR/DSSA/SPLB

TITLE: SUSCEPTIBILITY OF ICE CONDENSER AND MARK III CONTAINMENTS TO EARLY FAI

PRIORITY:	**ACTION LEVEL:** ACTIVE	**STATUS:** Cn
IDENT. DATE: 05/2001	**PRIORITIZATION DATE:** 00/0000	**RESOLUTION DATE:** 06/2010
ID STATUS: C	**PD STATUS:**	**RD STATUS:**
TASK MANAGER: J.S. GUO	**TAC NUMBERS:** MB7245	

WORK AUTH.: Memo from J. Zwolinski to F. Eltawila, "Resolution Process for Generic Safety Issue 189: "Post-Accident Combustible Gas Control in Pressure Suppression Containments"

ISSUE NUMBER: 189 **TYPE:** GSI **OFFICE/DIVISION/BRANCH:** NRR/DSSA/SPLB

TITLE: SUSCEPTIBILITY OF ICE CONDENSER AND MARK III CONTAINMENTS TO EARLY FAI

WORK SCOPE

The staff will conduct studies to determine whether providing an independent power supply for the igniter systems to deal with station blackout events provides a substantial increase in the overall protection of the public health and safety with implementation costs that are justified in view of this increased protection. Work on this issue is being continued following an initial screening in accordance with MD 6.4. A Task Action Plan for pursuing the issue was developed on February 13, 2002. The staff presented its technical assessment to the ACRS on June 6, 2002. The ACRS response on June 17, 2002, recommended that the staff consider the uncertainties associated with its technical assessment, including the uncertainty related to the use of a control volume code (MELCOR), to determine detailed hydrogen concentration distributions. The staff briefed the Thermal Hydraulic Phenomena and the Reliability PRA Sub-committees on November 5, 2002 and the full ACRS Committee on November 13, 2002. The ACRS recommended that the form of this action should be through the plant-specific severe accident management guidelines. RES provided its technical assessment for resolving GSI-189 to NRR in a memorandum dated December 17, 2002. RES concluded that further action to provide back-up power to one train of igniters is warranted for both ice condenser and Mark III plants. On January 30, 2003, NRR prepared a reply memorandum that outlined the next steps in the resolution of this GSI. NRR prepared a Task Action Plan to complete Management Directive 6.4, Stage 4, Regulation and Guidance Development, based on the preliminary decision to issue an Order. A review of the proposed regulatory actions and associated draft documents by senior management and OGC was completed and it was decided to pursue Rulemaking rather than an Order. Before a final decision is reached a Public Meeting and agreement by the Rulemaking Committee are needed. In the letter of November 13, 2002, to the Commission, the ACRS stated that they agreed with RES that further regulatory action by NRR was warranted for ice condenser and Mark III containments. A public meeting was held on June 18, 2003, to receive feedback from licensees and other stakeholders regarding the need to provide a backup power supply to the hydrogen igniters and NRR's consideration of rulemaking for the resolution of GSI-189. NRR briefed the ACRS on November 6, 2003, and recommended providing a backup power supply to the hydrogen igniters. The ACRS suggested that the form of action be through the use of plant-specific severe accident management guidelines (SAMG) and proceed with rulemaking. At that time, ACRS did not think an Order or Rulemaking could be supported. Based on the comments received from the ACRS at the NRR staff's presentation on November 6, 2003, NRR decided to commence rulemaking. The Task Action Plan (MD 6.4, Stage 4) was updated to reflect the pursuit of rulemaking.

On 11-17-2003, the ACRS Chairman wrote the NRC Chairman recommending the NRC proceed with rulemaking to require a backup power supply to the hydrogen igniters for PWR ice-condenser and BWR MARK IIII plants. The ACRS recommended that rulemaking include a small pre-staged generator with installed cables, conduit, panels, and breakers, or an equivalent diverse power supply. The ACRS also agreed with industry that the rulemaking should be accompanied by guidance that specifies the design requirements.

ISSUE NUMBER: 189 **TYPE:** GSI **OFFICE/DIVISION/BRANCH:** NRR/DSSA/SPLB

TITLE: SUSCEPTIBILITY OF ICE CONDENSER AND MARK III CONTAINMENTS TO EARLY FAI

STATUS

Through public meetings on February 3 and March 31, 2004, the staff discussed the proposed draft design criteria for backup power supply to the hydrogen igniters and received comments from stakeholders. The NRC completed a technical basis, a response to Entry Conditions for Rulemaking and a Backfit evaluation, for transmittal to the Rulemaking Committee for consideration. The Rulemaking Committee accepted NRR's technical basis on April 9, 2004, and is moving forward to pursue Rulemaking in accordance with NRR Office Letter LIC-300, which includes developing a formal Regulatory Analysis in accordance with NUREG/BG-0058, and coordinating the technical staff's presentation to the Rulemaking Approval Board. Currently, NRR is pursuing rulemaking and also considering voluntary licensee initiatives as an alternative to rulemaking. NRR is working on finalizing the design criteria for the backup power supply, and is administering a contract with ICF to merge and enhance the existing technical assessment into a regulatory analysis. NRR/DRIP is performing a cost/benefit analysis to support a possible rulemaking effort. The NRR held a public meeting with the public and industry on 09-21-2004, to get external stakeholders' input on the draft design criteria. Representatives of the PWR ice condenser utilities, the BWROG representing BWR Mark III utilities, and NEI discussed the proposed design criteria. They considered that the draft design criteria are generally acceptable with the exception of the one-hour time limit for BWR plants connecting the power source without making the system automatic, the power source is required to be manually connected to the power source within one hour. The BWROG is willing to make hardware modification to supply power from the existing HPCS diesel generator, and agreed to provide additional information regarding implementation cost for the pre-staged generator and relative risk contribution from either fast-SBO or slow-SBO at each of the four Mark III plants. BWROG requested that NRC provide feedback whether two hours instead of one hour for startup time is viable even it is not responsive to fast SBO events. At the public meeting, Duke power, representing two PWR ice condenser sites, Catawba 1&2, McGuire 1&2, is not planning a new backup power source, but agreed to make modifications on an existing safe shutdown diesel generator that could manually connect to provide backup power source as needed. AEP representative agreed to provide backup power source for D. C. Cook 1&2 from the large new diesel generators which are already planned for installation to support increased allowed outage time. TVA, representing two PWR ice condenser sites, Sequoyah 1&2, Watts Bar-1, will provide a new backup power source as the standard emergency power on 69kv board.

In November 2004, the staff reached a consensus to evaluate the proposed voluntary initiatives and pursue that path as a preferential solution before proceeding with rulemaking. In February and early March 2005, the NRR staff met with representatives of RES, NSIR, and OEDO to develop an understanding of the safety/security interface and actions initiated in the security arena that could impact the solution of the issue. On March 30, 2005, the staff met with senior representatives of the six affected utilities to present security-related insights. The staff plans to allow industry several months to digest this new information before requesting information on voluntary measures to be implemented at each affected site.

AFFECTED DOCUMENTS

10 CFR 50.44
10 CFR 50.34

ISSUE NUMBER: 189 **TYPE:** GSI **OFFICE/DIVISION/BRANCH:** NRR/DSSA/SPLB

TITLE: SUSCEPTIBILITY OF ICE CONDENSER AND MARK III CONTAINMENTS TO EARLY FAI

PROBLEM / RESOLUTION

NRR finalized the regulatory analysis to quantify the estimated costs and benefits of rulemaking both with and without voluntary actions. For the PWR ice-condenser containments, adding backup power to the igniters provides a substantial safety benefit at a justifiable cost. However, after implementation of expected voluntary actions, rulemaking would not be justified. For the BWR Mark III containments, the costs exceed the benefits for all evaluated options. However, defense-in-depth considerations in improving the balance among accident prevention and mitigation provides an additional un-quantified benefit that support rulemaking for both containment types. On 06/14/05, the EDO issued a memorandum to the Commissioners to inform the Commission of the regulatory analysis results and recent staff activities on GSI-189. The net benefits for the BWR Mark III containments are negative. If voluntary actions are found to be ineffective or inadequate, application of defense-in-depth considerations to justify rulemaking would involve a policy issue.

MILESTONES	ORIGINAL DATE	CURRENT DATE	ACTUAL DATE
Draft Technical Assessment	05/2002	--	05/2002
Meet with ACRS	06/2002	--	06/2002
Second Meeting on Technical Assessment with ACRS Sub-Committee	10/2002	--	11/2002
Final Technical Assessment	11/2002	--	11/2002
Meet with ACRS Full Committee	11/2002	--	11/2002
Transfer GSI to NRR	12/2002	--	12/2002
Determine Best Course of Action	02/2003	--	02/2003
Public Meeting with Stakeholders	02/2003	--	02/2003
Review RES Technical Assessment	02/2003	--	02/2003
Prepare Guidance and Provide Results to NRR Management	03/2003	--	03/2003
Distribute Draft Order and SECY Paper	03/2003	--	03/2003
Finalize CRGR Package	03/2003	--	03/2003
Provide Draft Order to OGC and Draft SECY to EDO	03/2003	--	03/2003

ISSUE NUMBER: 189 **TYPE:** GSI **OFFICE/DIVISION/BRANCH:** NRR/DSSA/SPLB

TITLE: SUSCEPTIBILITY OF ICE CONDENSER AND MARK III CONTAINMENTS TO EARLY FAI

MILESTONES	ORIGINAL DATE	CURRENT DATE	ACTUAL DATE
Meet with Rulemaking Committee	05/2003	--	05/2003
Conduct Public Meeting	06/2003	--	06/2003
Meet with OPA to Develop Communication Plan	06/2003	--	06/2003
Complete Communication Plan	07/2003	--	07/2003
Public Meeting to Address Design Criteria	11/2003	--	11/2003
NRR Meeting with ACRS	11/2003	--	11/2003
Public Meeting with Stakeholders	02/2004	--	02/2004
Public Meeting with Stakeholders	03/2004	--	03/2004
Brief Commissioner Merrifield	03/2004	--	03/2004
Issue Draft Design Criteria for Comment	08/2004	--	08/2004
Public Meeting with Stakeholders	09/2004	--	09/2004
Internal Meeting to Discuss Pursuit of Rulemaking	11/2004	--	11/2004
Perform Sensitivity Analysis to Determine Whether 2-Hour Startup Time for BWRs is Acceptable	11/2004	--	11/2004
Decision on Voluntary Licensee Initiatives as Alternative to Rulemaking	11/2004	--	11/2004
Evaluate Safety/Security Interface	03/2005	--	03/2005
Issue Status Paper to Commission	05/2005	--	06/2005
Seek Commitment for Implementation of Voluntary Initiatives	08/2005	08/2005	--
Finalize Design Criteria	11/2004	08/2005	--
Develop Rulemaking Plan	--	--	--

All Active Issue(s)

ISSUE NUMBER: 189 **TYPE:** GSI **OFFICE/DIVISION/BRANCH:** NRR/DSSA/SPLB

TITLE: SUSCEPTIBILITY OF ICE CONDENSER AND MARK III CONTAINMENTS TO EARLY FAI

MILESTONES	ORIGINAL DATE	CURRENT DATE	ACTUAL DATE
Commission Decision on Rulemaking	--	--	--
Complete Regulation and Guidance Development	06/2006	06/2006	--
Close Out Issue with Memo to the EDO	06/2010	06/2010	--

ISSUE NUMBER: 191 **TYPE:** GSI **OFFICE/DIVISION/BRANCH:** NRR/DSSA/SPLB

TITLE: ASSESSMENT OF DEBRIS ACCUMULATION ON PWR SUMP PERFORMANCE

PRIORITY: H **ACTION LEVEL:** ACTIVE **STATUS:**

IDENT. DATE: 09/1996 **PRIORITIZATION DATE:** 09/1996 **RESOLUTION DATE:** 12/2007

ID STATUS: C **PD STATUS:** C **RD STATUS:**

TASK MANAGER: R. ARCHITZEL **TAC NUMBERS:** MA6454, MB4864

WORK AUTH.: Memo to D. Morrison from W. Russell, "Third Supplemental User Need Request...Accident Generated Debris," 12/07/95

FIN Number	CONTRACTOR	CONTRACT TITLE
W6650	SEA	Technical Assistance in Resolving Generic Safety Issues
Y6041	LANL	Assessment of Debris Accumulation on Pressurized Water Reactors Sump Performance
J3213	ISL	Technical Support of GSI-191 Review Activities
J2978	LANL	Technical Assistance for the Resolution of the PWR Sump Clogging Issue
J3130	LANL	Technical Assistance in Support of the Plant Systems Branch

WORK SCOPE

The goals of the NRC's reassessment are to: (1) determine if the transport and accumulation of debris in containment following a LOCA will impede the operation of the ECCS in operating PWRs; (2) if it is shown that debris accumulation will impede ECCS operation, develop the technical basis for revising NRC's regulations or guidance to ensure that debris accumulation in containment will not prevent ECCS operation; (3) if it is shown that debris accumulation will impede ECCS operation, provide NRC technical reviewers with sufficient information on phenomena involved in debris accumulation and how it affects ECCS operation to facilitate the review of any changes to plants that may be warranted; and (4) issue Generic Communication and work with the industry plan to evaluate and resolve GSI-191 for all PWRs.

ISSUE NUMBER: 191 **TYPE:** GSI **OFFICE/DIVISION/BRANCH:** NRR/DSSA/SPLB

TITLE: ASSESSMENT OF DEBRIS ACCUMULATION ON PWR SUMP PERFORMANCE

STATUS

Preliminary parametric calculations were completed in July 2001 indicating the potential for debris accumulation for 69 cases. These 69 cases are representative of, but not identical to, the operating PWR population. Following the ACRS agreement with the staff's Technical Assessment of the issue in 09/2001, the issue was forwarded to NRR in a memorandum dated September 28, 2001. Consistent with Management Directive 6.4, NRR has the GSI-191 lead for Stages 4 through 6 of the Generic Issues Process. NRR has evaluated the technical assessment and prepared a Task Action Plan for developing appropriate regulatory guidance and resolution for GSI-191.

Following meetings with stakeholders on March 5 and April 29, 2003, NRC Bulletin 2003-01 was issued to PWR licensees on June 9, 2003, to (1) confirm their compliance with 10 CFR 50.46(b)(5) and other existing applicable regulatory requirements, or (2) describe any compensatory measures that have been implemented to reduce the potential risk due to post-accident debris blockage, as evaluations to determine compliance proceed. Revision 3 to Regulatory Guide 1.82 was issued in November 2003.

Generic Letter (GL) 2004-02 was issued in September 2004 requesting licensees to perform plant-specific mechanistic evaluations of sump performance following LOCA and HELB events, and to implement corrective actions as required to ensure compliance with regulatory requirements. The Nuclear Energy Institute (NEI) provided the staff a guidance report (GR) in May 2004 which consisted of the industry's proposed evaluation methodology to be used in performing the plant-specific evaluations. The staff reviewed the GR and issued a draft Safety Evaluation (SE) which provided supplementation to the GR and resulted in an NRC-approved evaluation methodology. The staff presented the the SE to CRGR, and to the ACRS SubCommittee and Full Committee in September and October 2004, respectively. The final SE was issued in December 2004. In January and April 2005, the staff held public meetings with NEI and owners to discuss the GL and SE, and to address questions as the evaluations are being performed with use of the SE and GR.

A joint NRC/Industry Integrated Chemical Effects Testing program started in 2004 is planned to be completed in August 2005. Because chemical precipitation products have been identified during the test program follow-on testing and analyses will be needed to address the effect on head loss. The NRC received and evaluated the licensee's 90 day responses to Generic letter 2004-02. The NRC is conducting pilot plant audits examining the analyses and design changes planned to close GSI-191. The first audit for Crystal River Unit 3 was completed in June 2005.

AFFECTED DOCUMENTS

(1) Regulatory Guide 1.82, Rev. 3
(2) NUREG-0800
(3) Generic Letter 85-22
(4) Bulletin 2003-01
(5) Generic Letter 2004-02

PROBLEM / RESOLUTION

None.

ISSUE NUMBER: 191 **TYPE:** GSI **OFFICE/DIVISION/BRANCH:** NRR/DSSA/SPLB

TITLE: ASSESSMENT OF DEBRIS ACCUMULATION ON PWR SUMP PERFORMANCE

MILESTONES	ORIGINAL DATE	CURRENT DATE	ACTUAL DATE
Close Out Issue with Memo to the EDO	01/2007	12/2007	--
NRR User Need Request Sent to RES	12/1995	--	12/1995
User Need Request Assigned to GSIB/RES	01/1996	--	01/1996
Reassessment Declared a New GSI	09/1996	--	09/1996
Issue SOW for Evaluation of GSI A-43	11/1996	--	11/1996
Complete Evaluation of GSI A-43	04/1997	--	03/1997
Issue SOW for Reassessment of Debris Blockages in PWR Containments Impact on ECCS Performance	09/1998	--	09/1998
Complete Collection and Review of PWR Containment and Sump Design and Operation Data	12/1999	--	12/1999
Complete All Debris Transport Tests	09/2000	--	08/2000
Complete Development of Models and Methods for Analyzing Impact of Debris Blockages in PWR Containments on ECCS Performance	04/2001	--	06/2003
Complete Parametric Evaluation	07/2001	--	07/2001
Proposed Recommendations to the ACRS	08/2001	--	08/2001
ACRS Review Completed	09/2001	--	09/2001
Complete Reassessment of Debris Blockages in PWR Containments Impact on ECCS Performance	09/2001	--	09/2001
Complete Estimate of Average CDF Reduction, Benefits, and Costs	04/2002	--	09/2001
Prepare Memo Discussing Proposed Recommendations (End of Technical Assessment Stage of Generic Issue Process)	04/2002	--	09/2001

ISSUE NUMBER: 191 **TYPE:** GSI **OFFICE/DIVISION/BRANCH:** NRR/DSSA/SPLB

TITLE: ASSESSMENT OF DEBRIS ACCUMULATION ON PWR SUMP PERFORMANCE

MILESTONES	ORIGINAL DATE	CURRENT DATE	ACTUAL DATE
Issue Transferred from RES to NRR	09/2001	- -	09/2001
Issue Bulletin 2003-01	05/2003	- -	06/2003
Discuss Reg. Guide 1.82, Rev. 3 with ACRS SubCommittee on Thermal-Hydraulic Phenomena	08/2003	- -	08/2003
Present Final Version of Reg. Guide 1.82, Rev. 3 to ACRS Full Committee	09/2003	- -	09/2003
ACRS Letter on Final Version of Reg. Guide 1.82, Rev. 3	09/2003	- -	09/2003
Draft Industry Guidance for Plant-Specific Analyses	10/2003	- -	10/2003
Issue Reg. Guide 1.82, Rev.3	09/2003	- -	11/2003
NRC Meeting with Stakeholders	03/2004	- -	03/2004
NRC Meeting with Stakeholders	05/2004	- -	05/2004
Receive Industry Guidance for Plant-Specific Analyses	09/2003	- -	05/2004
NRC Meeting with Stakeholders	06/2004	- -	06/2004
Brief ACRS SubCommittee on Proposed Generic Letter	06/2004	- -	06/2004
NRC Meeting with Stakeholders	06/2004	- -	06/2004
Develop Generic Letter for Resolution of GSI	07/2004	- -	07/2004
Brief Full ACRS Committee on Proposed Generic Letter	07/2004	- -	07/2004
Meet with CRGR on Proposed Generic Letter	08/2004	- -	08/2004
Issue Generic Letter 2004-02	09/2004	- -	09/2004
Meet with ACRS on Safety Evaluation of NEI 04-07	10/2004	- -	10/2004
ACRS Response on Safety Evaluation of NEI 04-07	10/2004	- -	10/2004

ISSUE NUMBER: 191 **TYPE:** GSI **OFFICE/DIVISION/BRANCH:** NRR/DSSA/SPLB

TITLE: ASSESSMENT OF DEBRIS ACCUMULATION ON PWR SUMP PERFORMANCE

MILESTONES	ORIGINAL DATE	CURRENT DATE	ACTUAL DATE
Receive GL Responses Addressing Plant-Specific Analyses	05/2005	09/2005	- -
Licensees Complete GSI-191 Activities, Including All Modifications	01/2007	12/2007	- -

ISSUE NUMBER: 193 **TYPE:** GSI **OFFICE/DIVISION/BRANCH:** RES/DSARE/ARREB

TITLE: BWR ECCS SUCTION CONCERNS

PRIORITY: **ACTION LEVEL:** ACTIVE **STATUS:** Cn

IDENT. DATE: 05/2002 **PRIORITIZATION DATE:** 00/0000 **RESOLUTION DATE:** 03/2007

ID STATUS: C **PD STATUS:** **RD STATUS:**

TASK MANAGER: S. RUBIN **TAC NUMBERS:**

WORK AUTH.: Memorandum to A. Thadani from F. Eltawila, "Results of Initial Screening of Generic Safety Issue 193, 'BWR ECCS Suction Concerns,'" October 16, 2003

WORK SCOPE

This GSI addresses the possible failure of the ECCS pumps due to unanticipated, large quantities of entrained gas in the suction piping from BWR suppression pools. The issue applies to MARK I, II, and III containments during large- and medium-break LOCAs, and could potentially cause pump failure or degraded performance due to gas binding, vapor locking, or cavitation.

STATUS

A Task Action Plan for the Technical Assessment of the issue was approved in May 2004 and a literature search for information on ECCS pump performance during intake conditions at high voiding was completed in March 2005. : DSARE/RES continued its literature search, in accordance with Phase I of the Task Action Plan, and found experimental evidence that gas could reach the ECCS pumps during a loss-of-coolant accident. DSARE found that the pumps can recover with as much as 20 percent void fraction; however, the impact of voiding on the continued operation of the pumps needs to be determined. DSARE will pursue additional information from NRR, Region I, and foreign sources.

MILESTONES	ORIGINAL DATE	CURRENT DATE	ACTUAL DATE
Complete Task Action Plan for a Technical Assessment	03/2004	--	05/2004
ECCS Pump Performance Literature Search	03/2005	--	03/2005
Review Pool Dynamics & Air Entrainment for Various Designs	10/2005	10/2005	--
Revise Pump Failure Probabilities	10/2005	10/2005	--
Complete PRA	06/2006	06/2006	--
Draft Recommendations and Revise TAP, if necessary	09/2006	09/2006	--
Meet with ACRS	12/2006	12/2006	--

ISSUE NUMBER: 193 **TYPE:** GSI **OFFICE/DIVISION/BRANCH:** RES/DSARE/ARREB

TITLE: BWR ECCS SUCTION CONCERNS

MILESTONES	ORIGINAL DATE	CURRENT DATE	ACTUAL DATE
Close Out Issue with Memo to the EDO	03/2007	03/2007	- -

ISSUE NUMBER: 196 **TYPE:** GSI **OFFICE/DIVISION/BRANCH:** RES/DSARE/ARREB

TITLE: BORAL DEGRADATION

PRIORITY: **ACTION LEVEL:** ACTIVE **STATUS:** Cn

IDENT. DATE: 11/2003 **PRIORITIZATION DATE:** 00/0000 **RESOLUTION DATE:** 06/2006

ID STATUS: C **PD STATUS:** **RD STATUS:**

TASK MANAGER: R. TRIPATHI **TAC NUMBERS:**

WORK AUTH.:

WORK SCOPE

Boral is used as a neutron absorber in the long-term, dry storage casks for spent reactor fuel, and water intrusioninto the Boral composite material could result in its chemical breakdown. This degradation of Boral could produce an inadvertent criticality, resulting in high neutron and fission gamma radiation fields which can be hazardous to personnel, unless adequate shielding is in place.

STATUS

A Task Action Plan for the Technical Assessment of the issue was approved on February 22, 2005. Efforts are underway to gather, review, and summarize the information needed to evaluate Boral degradation effects in casks and their potential impacts on the estimated frequency of accidental criticality.

MILESTONES	ORIGINAL DATE	CURRENT DATE	ACTUAL DATE
Develop Task Action Plan for the Technical Assessment of the GSI	02/2005	--	03/2005
Review the NMSS-Supplied Literature and Other Information for Evaluating Effects of Boral Degradation and Their Impact on Potential Inadvertent Criticality	09/2005	09/2005	--
Expand Literature Review	12/2005	12/2005	--
Compare the Results of Findings with NMSS Conclusions and Chart Future Course of Actiom	03/2006	03/2006	--
Close Out Issue with Memo to the EDO	06/2006	06/2006	--

ISSUE NUMBER: 196 **TYPE:** GSI **OFFICE/DIVISION/BRANCH:** RES/DSARE/ARREB

TITLE: BORAL DEGRADATION

ISSUE NUMBER: NMSS-0007 **TYPE:** GSI **OFFICE/DIVISION/BRANCH:** NMSS/FCSS/TSG

TITLE: CRITICALITY BENCHMARKS GREATER THAN 5% ENRICHMENT

PRIORITY: H **ACTION LEVEL:** ACTIVE **STATUS:**

IDENT. DATE: 05/1998 **PRIORITIZATION DATE:** 05/1998 **RESOLUTION DATE:** 01/2006

ID STATUS: C **PD STATUS:** C **RD STATUS:**

TASK MANAGER: H. FELSHER **TAC NUMBERS:**

WORK AUTH.:

FIN Number	CONTRACTOR	CONTRACT TITLE

WORK SCOPE

The importance of software (methods and data) in establishing the criticality safety of systems with fissile material is increasing as licensees work to optimize facilities and storage/transport packages at the same time that access to experimental data is decreasing. Available experimental data are insufficient to validate nuclear criticality safety evaluations for all required configurations at U-235 enrichments in the range of 5-20%.

The purpose of this project is to develop and confirm the adequacy of methods, analytical tools, and guidance for criticality safety software to be used in licensing nuclear facilities. The contractor will develop and test methods to estimate trends in calculational bias and uncertainty (thus extending the range of applicability) using sensitivity analysis techniques that: relate the importance of the system parameters to the calculated neutron multiplication factor; provide expert guidance on assessing the adequacy of the parameter phase space used in the validation process and the resulting bias and uncertainty; and illustrate use of the guidance by application to a regime of experimental phase space (such as 5-10% U-235 and degree of moderation) that has limited measured data but extensive interest in terms of current and planned safety evaluations.

ISSUE NUMBER: NMSS-0007 **TYPE:** GSI **OFFICE/DIVISION/BRANCH:** NMSS/FCSS/TSG

TITLE: CRITICALITY BENCHMARKS GREATER THAN 5% ENRICHMENT

STATUS

The final reports for the sensitivity/uncertainty (S/U) methods were published in November 1999 as Volumes 1 and 2 of NUREG/CR-6655. The reports cover the following subjects: (1) methodology for defining range of applicability including extensions of enrichments from 5% to 11%; (2) test applications and results of the method; (3) test application for higher enrichments using foreign experiments; (4) feasibility study for extending the method to multidimensional analyses, such as transport casks and reactor fuel.

Results of the test applications of the ORNL methods show that, for simple geometries with neutron spectra that are well moderated (high H/X), benchmark experiments at 5% enrichment are applicable to calculations up to 11% enrichment. On the other hand, these test applications also show that benchmark experiments at intermediate and higher H/X values are not applicable to calculations at very low H/X. There are relatively few benchmarks at these very low H/X values for many compositions of interest to LEU licensees.

Although the ORNL method must be applied by licensees to each individual process to determine an acceptable subcritical margin, the preliminary results indicate that there may be situations where there are no applicable benchmarks. In these cases, the method does provide sensitivity and uncertainty information to aid designers in allowing adequately large margins to cover the lack of benchmark validation.

A new statement of work is needed for other contract work. A User Need Memo to RES dated 04/17/2001 requested assistance for that work, including making the computer codes for S/U methods available through the release of SCALE 5.0. In a memo from RES to NMSS dated 06/11/2001, once funding is available, RES will work with NMSS. Since RES did not provide any funding, no work had been done. Therefore, the completion date and milestone dates were changed. Under an NMSS contract with ORNL, NRC was provided with a pre-release of the S/U computer codes in SCALE 5.0, along with training. However, both ORNL and NRC recognized problems with interpreting the results. SCALE 5.0 was released in June 2004 and so the dates on the subsequent milestones were changed, except for the training item which was completed in June 2004 by non-NRC funded ORNL tutorials at the 2004 Annual American Nuclear Society Meeting and NMSS funded training for NRC.

The 04/17/2001 User Need Memo from NMSS to RES was canceled by NMSS by memo dated 06/24/2004 because due to higher priority work, RES had not been able to fund the contract. Independent of RES, NMSS had used an existing contract with ORNL to complete most of the work. The items left to be done do not need contract work.

AFFECTED DOCUMENTS

To be determined.

PROBLEM / RESOLUTION

None.

ISSUE NUMBER: NMSS-0007 **TYPE:** GSI **OFFICE/DIVISION/BRANCH:** NMSS/FCSS/TSG

TITLE: CRITICALITY BENCHMARKS GREATER THAN 5% ENRICHMENT

MILESTONES	ORIGINAL DATE	CURRENT DATE	ACTUAL DATE
Development of Generalized Sensitivity Methods	12/1997	--	12/1997
Acquisition and Documentation of Russian Data	05/1998	--	05/1998
Development of Guidance for Defining Ranges of Applicability	07/1998	--	11/1998
Application of Guidance to Extend Low Enrichment Range	09/1998	--	11/1998
Technical Assistance and Project Planning	03/1999	--	03/1999
Receive Final ORNL Contract Reports	03/1999	--	10/1999
Publish Final ORNL Contract Reports	10/1999	--	11/1999
User Need Request Memo to RES	12/2000	--	06/2001
Cancel User Need Request Memo to RES	06/2004	--	06/2004
Make New Computer Codes Available Through Scale 5.0 Release	03/2001	--	06/2004
Training to NRC Staff and Licensees on S/U Methods in SCALE 5.0	09/2002	--	06/2004
Revise Staff Procedures and Communicate Acceptability of New Methods to Licensees	10/2000	07/2005	--
Determine If User Needs Have Been Met	11/2000	10/2005	--
Close Out Issue	03/2003	01/2006	--

ISSUE NUMBER: NMSS-0014 **TYPE:** GSI **OFFICE/DIVISION/BRANCH:** NMSS/FCSS/FCLB

TITLE: SURETY ESTIMATES FOR GROUNDWATER RESTORATION AT IN-SITU LEACH FACILITI

PRIORITY: M **ACTION LEVEL:** ACTIVE **STATUS:**

IDENT. DATE: 06/1998 **PRIORITIZATION DATE:** 07/1998 **RESOLUTION DATE:** 07/2005

ID STATUS: C **PD STATUS:** C **RD STATUS:**

TASK MANAGER: R. WELLER **TAC NUMBERS:**

WORK AUTH.: NMSS Operational Events Briefing on 06-08-98.

WORK SCOPE

This research will provide a methodology to calculate surety for groundwater restoration activities at in situ leach uranium extraction facilities and a post-restoration groundwater quality stability monitoring methodology. The research will be conducted by an RES contractor.

STATUS

RES developed a contract Statement of Work for this effort in July 2001. The scheduled completion of this GSI was delayed due to requests by the NRC contractor (USGS) for additional information. The NRC contractor, USGS, has finished the sub-tasks and has completed the draft report "Consideration of Geochemical Issues in Groundwater Restoration at Uranium In-Situ Leach Mining Facilities." NRC staff requested additional information on October 2003. The NRC contractor has incorporated additional information provided by the industry and comments from the staff. A revised draft NUREG was completed in December 2004. The draft NUREG/CR-6870, "Consideration of Geochemical Issues in Groundwater Restoration at Uranium In Situ Leach Mining Facilities," was issued for public comment in June 2005 with comments due by August 31, 2005.

AFFECTED DOCUMENTS

(1) SRP for In Situ Leach Uranium Extraction License Applications

(2) BTP on Financial Assurances for Reclamation, Decommissioning, and Long Term Surveillance and Control of Uranium Recovery Facilities

PROBLEM / RESOLUTION

None.

MILESTONES	ORIGINAL DATE	CURRENT DATE	ACTUAL DATE
Pore Volume - Data Evaluation (Task 1)	12/1997	--	06/1998
Commission Response to SECY-99-013	08/1999	--	07/2000
Complete Statement of Work	06/2001	--	07/2001

All Active Issue(s)

ISSUE NUMBER: NMSS-0014 **TYPE:** GSI **OFFICE/DIVISION/BRANCH:** NMSS/FCSS/FCLB

TITLE: SURETY ESTIMATES FOR GROUNDWATER RESTORATION AT IN-SITU LEACH FACILITI

MILESTONES	ORIGINAL DATE	CURRENT DATE	ACTUAL DATE
Draft NUREG to Staff for Comment	08/2002	--	08/2003
Revised Draft NUREG	04/2004	--	12/2004
Draft NUREG/CR-6870 Issued for Public Comment	09/2002	--	06/2005
Receive Public Comments on Draft NUREG/CR-6870	08/2005	08/2005	--
Issue Final NUREG	09/2002	10/2005	--

ISSUE NUMBER: NMSS-0016 **TYPE:** GSI **OFFICE/DIVISION/BRANCH:** NMSS/IMNS/RGB

TITLE: ADEQUACY OF 0.05 WEIGHT PERCENT LIMIT IN 10 CFR 40

PRIORITY: M **ACTION LEVEL:** ACTIVE **STATUS:**

IDENT. DATE: 06/1998 **PRIORITIZATION DATE:** 07/1998 **RESOLUTION DATE:** - -

ID STATUS: C **PD STATUS:** C **RD STATUS:**

TASK MANAGER: G. COMFORT **TAC NUMBERS:**

WORK AUTH.: NMSS Operational Events Briefing on 06-08-98.

WORK SCOPE

Exposure to the "unimportant quantities" of source material defined in 10 CFR 40.13(a) as < 0.05 Wt% uranium or thorium could result in annual doses that exceed NRC's public dose limit of 100 mem/yr from all sources. In 07/96, DWM/NMSS staff developed a draft User Need memo requesting development of a regulation to limit the transfer of source material meeting the "unimportant quantity" limit, or to revise the definition of source material.

Discussions in 1996 and 1997 with RES and OGC, as well as with other NMSS divisions, indicated that there were several options available to the staff to revise the definition of source material. However, the User Need memo was never finalized because of lack of budgeted resources and the limited potential for success of the options.

Subsequently, FCSS received a licensee request to transfer baghouse dust containing less than 0.05 Wt% uranium and thorium to an exempt person per 10 CFR 40.51(b)(3) and 40.13 (a). Some conservative dose estimates indicated that the transfer could result in doses exceeding the public dose limit. FCSS proposed a rulemaking to immediately cease transfers under 40.51(b)(3) and 40.51(b)(4) of source material to persons operating under the exemption in 40.13(a). By eliminating these provisions, any future transfers would have to meet existing general license conditions, or be specifically approved on a case-by-case basis.

ISSUE NUMBER: NMSS-0016 **TYPE:** GSI **OFFICE/DIVISION/BRANCH:** NMSS/IMNS/RGB

TITLE: ADEQUACY OF 0.05 WEIGHT PERCENT LIMIT IN 10 CFR 40

STATUS

The recommendation to amend part 40 was dropped from the final FCSS Commission Paper. On 02-02-1999, an SRM on SECY-98-022 requested options for commission consideration on how to proceed with jurisdictional and technical issues on regulation of source material. SECY-99-259 responding to SRM was issued on 11/01/1999. SRM issued 03/09/2000 approving staff recommendations with comments. A proposed rule was sent to the Commission on 09-25-2000 in SECY-00-0201. The SRM responding to SECY-00-0201, dated March 29, 2002, directed the staff to publish the proposed rule for comment. Proposed rule was published in the Federal Register on August 28, 2002. Twenty-five comment letters were received and are being evaluated.

On June 24, 2003, the staff notified the Commission in SECY-03-0106 that it planned to postpone finalization of the Rule until the Commission had an opportunity to review and direct the staff regarding other recent related issues. On October 8, 2003, the Commission issued an SRM that did not object to the postponement and directed the staff to continue to review transfers based on previous Commission guidance. Work on the Rule has not restarted.

AFFECTED DOCUMENTS

To be determined.

PROBLEM / RESOLUTION

None.

MILESTONES	ORIGINAL DATE	CURRENT DATE	ACTUAL DATE
Issue Options Paper (SECY-99-259)	07/1998	--	11/1999
Receive SRM	02/2000	--	03/2000
Proposed Rule to the Commission	08/2000	--	09/2000
Publish Proposed Rule	08/2002	--	08/2002
Final Rule to Commission	--	--	--
Issue Final Rule	--	--	--
Close Out Issue	12/2001	--	--