



**Northeast
Nuclear Energy**

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The Northeast Utilities System

JUN 29 2000

Docket Nos. 50-336
50-423
B18156

RE: 10 CFR 50.59

U.S. Nuclear Regulatory Commission
Attention: Document Control Desk
Washington, DC 20555

Millstone Nuclear Power Station, Unit Nos. 2 and 3
10 CFR 50.59 and Commitment Change Annual Reports for 1999

Pursuant to the provisions of 10 CFR 50.59(b)(2), the annual reports for Millstone Nuclear Power Station, Unit Nos. 2 and 3, are submitted in Enclosures 1 and 2 for changes made to the plant over the period January 1, 1999, to December 31, 1999. Enclosure 3 of this submittal is the 1999 Commitment Change Annual Report for both Unit Nos. 2 and 3. The Commitment Change Annual Report is being submitted consistent with the Northeast Nuclear Energy Company Regulatory Commitment Management Program.

There are no regulatory commitments contained within this letter.

Should you have any questions regarding these reports, please contact Mr. David W. Dodson at (860) 447-1791, extension 2346.

Very truly yours,

NORTHEAST NUCLEAR ENERGY COMPANY

Stephen E. Scace - Director
Nuclear Oversight and Regulatory Affairs

cc: See next page

JE47

Enclosures (3)

cc: H. J. Miller, Region I Administrator
J. I. Zimmerman, NRC Project Manager, Millstone Unit No. 2
D. P. Beaulieu, Senior Resident Inspector, Millstone Unit No. 2
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Enclosure 1

Millstone Nuclear Power Station, Unit No. 2

10 CFR 50.59 Annual Report for 1999

Millstone Nuclear Power Station

Unit No. 2

**10CFR50.59
Annual Report For 1999**

January 1, 1999, through December 31, 1999

MILLSTONE UNIT NO. 2

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INTRODUCTION

None of the plant design changes, procedure changes, temporary modifications, or Final Safety Analysis Report changes described herein constitute, nor constituted an Unreviewed Safety Question per the criteria of 10CFR50.59.

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PLANT DESIGN CHANGES

CALCULATIONS

<u>CALCULATION NUMBER</u>	<u>TITLE</u>	<u>SAFETY EVALUATION</u>
98ENG-02609C2	Seismic Loads on Containment Base Mat and Walls	S2-EV-98-0260
98ENG-02424E2	Baseline Cable Ampacity Calculation	S2-EV-98-0293
PA79-126-01027E2, Rev 1	MP2 Emergency Diesel Generator (EDG) Loading Calculation	S2-EV-97-0035
PA79-126-01027E2, Rev 2	MP2 Emergency Diesel Generator (EDG) Loading Calculation	S2-EV-99-0058

DESIGN CHANGE NOTICES

<u>DCN NUMBER</u>	<u>TITLE</u>	<u>SAFETY EVALUATION</u>
DM2-00-1174-97	Machining of Stems of MOVs 2-SI-411 and 2-SI-412 for Installation of a QSS Thrust/Torque Sensor	S2-EV-97-0201
DM2-00-0281-98	Hydrogen Monitoring/Post Accident Sampling System Modification	S2-EV-97-0045 R1
DM2-00-0678-98	Correct and Expand ESAS Equipment Tabulation Drawing 28150, Sheet 2	S2-EV-99-0060
DM2-00-0823-98	Update Schematics Related to ESAS to Include Enhancements and Corrections per CR M2-98-1058	S2-EV-99-0117
DM2-00-0959-98	Revise CEDS FSAR Fig. 7.4-3 (25203-29155 sh.9) To Reflect Removal of RRS, AWP AND Auto Seq. Input	S2-EV-99-0078
DM2-00-1164-98	Update of FSAR Table 5.2-11 and Figure 5.2-31 to change normal position of Valve 2-RC-003	S2-EV-99-0067
DM2-00-2053-98	SDC Suction Line Potential Overpressurization During LOCA or MSLB	S2-EV-99-0001
DM2-02-0152-98	Cavitating Venturis for AFW Pump Discharge Lines and FSAR Section 14.8.2, Containment Analysis	E2-EV-98-0026
DM2-00-0012-99	Exceptions and Justifications for Electrical Separation Specification, SP-M2-EE-0016	S2-EV-99-0068
DM2-00-0019-99	Revised Design Specification for the Pressurizer Main and Auxiliary Spray Piping (7604-M-290)	S2-EV-99-0009
DM2-00-0122-99	Enclosure Building Blowout Panels	S2-EV-99-0020
DM2-00-0187-99	Modification of CPF Process Radiation Monitor Control Room Annunciator C06, C24B	S2-EV-99-0042
DM2-00-0812-99	Detector Replacement for RM-8132B, Unit 2 Stack Gas Rad Monitor	S2-EV-99-0126
DM2-00-0856-99	X-64 / X-65 Cooler Modification	S2-EV-99-0139

DESIGN CHANGE RECORDS

<u>DCR NUMBER</u>	<u>TITLE</u>	<u>SAFETY EVALUATION</u>
M2-96051	Hydrogen Monitoring/Post Accident Sampling System Modification	S2-EV-97-0045 R1
M2-96072	Reactor Coolant Post Accident Sampling (PASS) System Modifications and Enhancements	S2-EV-97-0031
M2-96-077	Replacement of Inadequate Core Cooling Monitoring System (ICCMS)	E2-EV-97-0002
M2-97002	MP2-AC-11, Enclosure Building Damper and Ductwork Replacement	S2-EV-97-0034
M2-97011	Emergency Diesel Generator A and B Pre-Lube, Slow Start and "Ready to Load" Alarm Modification	S2-EV-97-0041
M2-97014	Pressurizer Pressure Low Range Transmitter Replacement Modification	S2-EV-97-0231
M2-97017	Cavitating Venturis for AFW Pump Discharge Lines and FSAR Section 14.8.2, Containment Analysis	E2-EV-98-0026
M2-97033, Rev 1	Containment Air Radiation Monitoring System Up-grade, RM-8123A/B and RM-8262A/B	S2-EV-97-0096 R1
M2-97037, Rev 1	Valves 2-CS-16.1A and B Pressure Locking Modifications	S2-EV-98-0071
M2-97055, Rev 2	Reroute of Power Cable to Preclude Potential Damage to Appendix R MOV 2-SI-652 and Starter Coil Removal/Installation for MOV 2-SI-651	S2-EV-98-0007
M2-98013	Isolate Steam Generator Blowdown on Low-Low Steam Generator Level	S2-EV-98-0171
M2-98020	Enclosure Building Blowout Panels	S2-EV-98-0138
M2-98028	Provide 2-RB-402 Valve Closed Indication in the Control Room	S2-EV-98-0079
M2-98052	Shutdown Cooling Overpressurization Protection	S2-EV-98-0178
M2-98055	Repowering of 2-SI-651, 2-CH-517, and 2-CH-517 for Boron Precipitation Control	S2-EV-98-0222
M2-98067	Hot Short Mods for MOVs 2-MS-65A and 2-MS-65B	S2-EV-98-0238
M2-98084	Addition of Ventilated Cable Tray Covers and Sil-temp to MP2	S2-EV-98-0290
M2-98087	Mid-Cycle 13 SPDS Upgrade	S2-EV-98-0273
M2-98089	MOV 2-MS-202 Close Coil Removal Document Update	S2-EV-98-0269
M2-98092	Spent Fuel Pool Refueling Analysis	S2-EV-98-0307
M2-98094	Backup Air Bottle Supply Upgrade to Hydrogen Monitoring System CIVs	S2-EV-98-0303
M2-98095	TDAFP Redundant Power Supply	S2-EV-99-0011
M2-98096	ESF Room Sump High Water Level Alarm Switch Upgrade	S2-EV-99-0063
M2-98098	Reactor Coolant Post Accident Sampling System Total Dissolved Gas	S2-EV-99-0002
M2-98105	Replacement of Pressurizer Spray Header Piping	S2-EV-99-0017
M2-98106	2-AC-11 Single Failure Vulnerability	S2-EV-99-0022
M2-99005	Auxiliary and Main Feedwater Control and Isolation Issues	S2-EV-99-0012

DESIGN CHANGE RECORDS
(Continued)

<u>DCR NUMBER</u>	<u>TITLE</u>	<u>SAFETY EVALUATION</u>
M2-99006	Backup Air Bottle Supply Upgrade to Auxiliary Feedwater Regulating Valves	S2-EV-99-0027
M2-99014	Containment Spray Nozzle Replacement	S2-EV-99-0019
M2-99019	Reload Design for Millstone Unit 2 Cycle 13 - Reload Safety Evaluation for Restart to Mode 2 and Mode 1 Operation After Extended Shutdown	E2-EV-99-0007

MINOR MODIFICATIONS

<u>MMOD NUMBER</u>	<u>TITLE</u>	<u>SAFETY EVALUATION</u>
M2-99007	Add (Appendix J) Drain Isolation Valve to 1"CCB-5	S2-EV-99-0032
M2-99008	EBFS Area Fire Detection Zone Addition	S2-EV-99-0023
M2-99023	Installation of Carbon Filtration System for the Turbine Building and Auxiliary Feedwater Pump Sumps	S2-EV-99-0073
M2-99027	Bonnet Seal Enhancements for Motor Operated Valve 2-SI-652	S2-EV-99-0085
M2-99036	Low Air Flow Alarm Removal For INV-1 Through INV-6	S2-EV-99-0112
M2-99048	RCP Seal Controlled Bleed-off Relief Valve Replacement	S2-EV-99-0133

TECHNICAL REQUIREMENTS MANUAL CHANGES

<u>TRMCR NUMBER</u>	<u>TITLE</u>	<u>SAFETY EVALUATION</u>
98-2-9	Isolate Steam Generator Blowdown on Low-Low Steam Generator Level	S2-EV-98-0171
98-2-26	Hot Short Mods for MOVs 2-MS-65A and 2-MS-65B	S2-EV-98-0238
98-2-27	Reroute of Power Cable to Preclude Potential Damage to Appendix R MOV 2-SI-652 and Starter Coil Removal/Installation for MOV 2-SI-653	S2-EV-98-0007
98-2-28	MOV 2-MS-202 Close Coil Removal Document Update	S2-EV-98-0269
98-2-29	Shutdown Cooling Overpressurization Protection	S2-EV-98-0178
98-2-31	Valves 2-CS-16.1A and B Pressure Locking Modifications	S2-EV-98-0071
99-2-1	TRM Change to Incorporate New Linear Heat Generation Rate in Cycle 13 Core Operating Limits Report Due to Revision of Small Break LOCA Analysis	S2-EV-99-0038
99-2-2	Additional Requirements, Fire Protection System	S2-EV-99-0047
99-2-3	Add (Appendix J) Drain Isolation Valve to 1"CCB-7	S2-EV-99-0032
99-2-4	Revision to Section 3.0 of the Millstone Unit 2 Technical Requirements Manual	S2-EV-98-0174
99-2-8	Technical Requirements Manual	S2-EV-99-0069
99-2-10	RCP Speed Time Response	S2-EV-99-0075
99-2-11	Removal of 2-FW-5A & 2-FW-5B From TRM Table 3.3-5H	S2-EV-99-0077
99-2-22	Revision of Containment Penetrations 6, 7, 8, 9 Valve List from TRM Table 5-1, FSAR Table 5.2-11, FSAR Table 5.2-13 and FSAR Figures 5.2-28 and 29	S2-EV-99-0141

PROCEDURE CHANGES

<u>PROCEDURE NUMBER</u>	<u>TITLE</u>	<u>SAFETY EVALUATION</u>
EOP 2540 Rev 18	Functional Recovery	E2-EV-99-0003
EOP 2540A Rev 9	Functional Recovery of Reactivity Control	E2-EV-99-0003
EOP 2540B Rev 10	Functional Recovery of Vital Auxiliaries	E2-EV-99-0003
EOP 2540C Rev 13	Functional Recovery of RCS Inventory and Pressure	E2-EV-99-0003
EOP 2540D Rev 14	Functional Recovery of Heat Removal	E2-EV-99-0003
EOP 2540E Rev 11	Functional Recovery of Containment Integrity	E2-EV-99-0003
OPS Form 2540-1 Rev 13	Functional Recovery	E2-EV-99-0003
EOP 2541	EOP Technical Data Book	E2-EV-99-0004
AOP 2560 R8	Storms, High Winds and High Tides	S2-EV-99-0098
CP 2804L Rev 3	Rx Coolant and Liquid Waste PASS	S2-EV-99-0086
SPROC EN98-2-21	Main Generator Stability Test	S2-EV-99-0088

SPECIFICATION CHANGES

<u>SPECIFICATION NUMBER</u>	<u>TITLE</u>	<u>SAFETY EVALUATION</u>
SPEC SP-M2-EE-012	Design Specification for Regulatory Guide 1.97 Instrumentation Millstone Unit 2 - Standard Specification	S2-EV-99-0007
SPEC SP-M2-EE-332 Rev. 1	MP2 Environmental Conditions for Equipment Qualification,	S2-EV-99-0064
SPEC SP-M2-EE-352 Rev. 4	and Specification for MP2 Environmental Qualification Master List and Equipment Qualification Records	

STATION BLACKOUT SAFE SHUTDOWN SCENARIO CHANGE

<u>DOCUMENT NUMBER</u>	<u>TITLE</u>	<u>SAFETY EVALUATION</u>
SP-EE-362	Station Blackout (SBO), Safe Shutdown Scenario Document	S2-EV-99-0050

TEMPORARY MODIFICATIONS

<u>TEMP MOD NUMBER</u>	<u>TITLE</u>	<u>SAFETY EVALUATION</u>
Tagging Clearance No. 2-1785-99	Remove Fuses for SI-628 HDR 1B Check Valve Leakage Drain Stop	S2-EV-99-0138
2-99-008	Temporary Leak Repair, "A" EDG Supply	S2-EV-99-0079
2-99-009	Support of the Service Water Header to the "A" and "B" Header to the EDG	S2-EV-99-0083
2-99-030	Temporary Contractor Water Treatment Facility	S2-EV-99-0144
2-99-031	Removal of Loop 1 Hot Leg RTD TE-112HD from RPS Channel D Input - Substitution with Loop 2 Hot Leg RTD TE-122HD	S2-EV-99-0145

FINAL SAFETY ANALYSIS REPORT CHANGES

<u>FSARCR NUMBER</u>	<u>TITLE</u>	<u>SAFETY EVALUATION</u>
97-MP2-12	FSAR Changes to Tables 6.5-1, 6.5-2, 6.6-1, 9.9-1, 9.9-2, 9.9-3, 9.9-4, 9.9-6, 9.9-7, 9.9-8, 9.9-9, 9.9-10, 9.9-11, 9.9-12, 9.9-13, 9.9-14, 9.9-15, 9.9-19, 9.9-20, 9.9-21	S2-EV-98-0265
97-MP2-20	MP2 Emergency Diesel Generator (EDG) Loading Calculation	S2-EV-97-0035
97-MP2-26	Replacement of Inadequate Core Cooling Monitoring System (ICCMS)	E2-EV-97-0002
97-MP2-32	Reactor Coolant Post Accident Sampling (PASS) System Modifications and Enhancements	S2-EV-97-0031
97-MP2-35	Emergency Diesel Generator A and B Pre-Lube, Slow Start and "Ready to Load" Alarm Modification	S2-EV-97-0041
97-MP2-101	Containment Air Radiation Monitoring System Up- grade, RM-8123A/B and RM-8262A/B	S2-EV-97-0096 R1
97-MP2-167	Provide 2-RB-402 Valve Closed Indication in the Control Room	S2-EV-98-0079
98-MP2-18	Pressurizer Pressure Low Range Transmitter Replacement Modification	S2-EV-97-0231
98-MP2-27	Isolate Steam Generator Blowdown on Low-Low Steam Generator Level	S2-EV-98-0171
98-MP2-62	Station Blackout (SBO), Safe Shutdown Scenario Document	S2-EV-99-0050
98-MP2-67	Change to MP2 FSAR Section 14.1, Increase in Heat Removal by the Secondary System	E2-EV-98-0025
98-MP2-86	Enclosure Building Blowout Panels	S2-EV-98-0138
98-MP2-90	FSAR Change to Reflect Removal of Containment Pedestal Crane	S2-EV-98-0141
98-MP2-98	Valves 2-CS-16.1A and B Pressure Locking Modifications	S2-EV-98-0071
98-MP2-114	FSARCR for Various Changes to MP2 FSAR Sections 6.3 and 6.4	S2-EV-98-0114
98-MP2-123	EBFS Charcoal Filters Temperature Sensors	S2-EV-98-0165
98-MP2-151	Shutdown Cooling Overpressurization Protection	S2-EV-98-0178
98-MP2-167	FSARCR for Section 11.1, Radioactive Waste Processing Systems	S2-EV-97-0047 S2-EV-99-0008
98-MP2-169	Repowering of 2-SI-651, 2-CH-517, and 2-CH-517 for Boron Precipitation Control	S2-EV-98-0222
98-MP2-173	Change to Steam Generator Level-AFW Auto Initiation Functional Description: FSAR 7.3.2.2.h	S2-EV-98-0254
98-MP2-174	Millstone Site Radio Communication	S2-EV-98-0274
98-MP2-175	Cavitating Venturis for AFW Pump Discharge Lines and FSAR Section 14.8.2, Containment Analysis	E2-EV-98-0026
98-MP2-177	Addition of Ventilated Cable Tray Covers and Sil-temp to MP2	S2-EV-98-0290
98-MP2-179	Hot Short Mods for MOVs 2-MS-65A and 2-MS-65B	S2-EV-98-0238
98-MP2-180	Reroute of Power Cable to Preclude Potential Damage to Appendix R MOV 2-SI-652 and Starter Coil Removal/Installation for MOV 2-SI-652	S2-EV-98-0007

**FINAL SAFETY ANALYSIS REPORT CHANGES
(Continued)**

<u>FSARCR NUMBER</u>	<u>TITLE</u>	<u>SAFETY EVALUATION</u>
98-MP2-181	MOV 2-MS-202 Close Coil Removal Document Update	S2-EV-98-0269
98-MP2-188	FSARCR for CVCS SEAM Review (Procedures)	S2-EV-98-0297
98-MP2-194	Additional Alarm Description in FSAR Section 8.3.4.1 Emergency Generator Special Feature	S2-EV-98-0298
98-MP2-196	FSARCR for RPS, ESFAS, and RAD Monitoring from FSAR SEAM Review	S2-EV-98-0304
98-MP2-199	Spent Fuel Pool Refueling Analysis	S2-EV-98-0307
98-MP2-200	FSAR Update to Incorporate Small Break LOCA and Large Break LOCA Reanalyses	E2-EV-98-0033
99-MP2-1	Changes to FSAR Section 6.5 and Table 7.5-1 from CAR and Cooling System FSAR/Calculation/Procedure Seam Review	S2-EV-98-0313
99-MP2-2	Revisions to ESF Descriptions	S2-EV-98-0305
99-MP2-3	Change to MP2 FSAR Section 14.0, (Safety Analysis) General	E2-EV-98-0035
99-MP2-5	NI Annunciator Circuits Modification	S2-EV-97-0003
99-MP2-6	Change Pipe Rupture Dynamic Effects Design Basis-From Double-Ended- Guillotine-Break to Leak- Before-Break (LBB) for the Main Coolant Loop (MCL), Safety Injection (SI), and Shutdown Cooling (SDC) Piping at Millstone Unit 2	S2-EV-98-0312
99-MP2-8	SDC Suction Line Potential Overpressurization During LOCA or MSLB	S2-EV-99-0001
99-MP2-9	Baseline Cable Ampacity Calculation	S2-EV-98-0293
99-MP2-12	Safety Evaluation for FSARCR for Containment Spray System Seam Review	S2-EV-99-0006
99-MP2-14	Reactor Coolant Post Accident Sampling System Total Dissolved Gas	S2-EV-99-0002
99-MP2-15	TDAFP Redundant Power Supply	S2-EV-99-0011
99-MP2-16	Revised Design Specification for the Pressurizer Main and Auxiliary Spray Piping (7604-M-290)	S2-EV-99-0009
99-MP2-17	Fuel and Reactor Component Handling System Seam Review	S2-EV-99-0013
99-MP2-18	FSAR Change Request - Piping Modal Combination, Sections 5.8.4 and 5.8.5	S2-EV-99-0015
99-MP2-19	Backup Air Bottle Supply Upgrade to Hydrogen Monitoring System CIVs	S2-EV-98-0303
99-MP2-20	Enclosure Building Blowout Panels	S2-EV-99-0020
99-MP2-22	2-AC-11 Single Failure Vulnerability	S2-EV-99-0022
99-MP2-23	Access Control Area Air Conditioning System	S2-EV-98-0310
99-MP2-24	FSARCR for Control Room Air Conditioning (CRAC)	S2-EV-99-0029
99-MP2-25	Seismic Loads on Containment Base Mat and Walls	S2-EV-98-0260
99-MP2-26	Auxiliary and Main Feedwater Control and Isolation Issues	S2-EV-99-0012

**FINAL SAFETY ANALYSIS REPORT CHANGES
(Continued)**

<u>FSARCR NUMBER</u>	<u>TITLE</u>	<u>SAFETY EVALUATION</u>
99-MP2-27	Add (Appendix J) Drain Isolation Valve to 1"CCB-6	S2-EV-99-0032
99-MP2-28	Safety Evaluation for FSAR for the Auxiliary Building Seam Review	S2-EV-99-0031
99-MP2-29	Update AFW Pump P9A Impeller Material	S2-EV-99-0039
99-MP2-30	Backup Air Bottle Supply Upgrade to Auxiliary Feedwater Regulating Valves	S2-EV-99-0027
99-MP2-31	Containment Spray Nozzle Replacement	S2-EV-99-0019
99-MP2-34	Modification of CPF Process Radiation Monitor Control Room Annunciator C06, C24B	S2-EV-99-0042
99-MP2-36	FSAR Changes to Section 6.7 and Appendix 1A	S2-EV-99-0005
99-MP2-37	Mid-Cycle 13 SPDS Upgrade	S2-EV-98-0273
99-MP2-39	Change to FSAR Description of Sample Systems	S2-EV-99-0051
99-MP2-40	Design Specification for Regulatory Guide 1.97 Instrumentation Millstone Unit 2 - Standard Specification	S2-EV-99-0007
99-MP2-41	Restoration of MP2 Service Water Pumps Following Intake Structure Flooding	S2-EV-99-0043
99-MP2-42	MP2 Emergency Diesel Generator (EDG) Loading Calculation	S2-EV-99-0058
99-MP2-43	Correct and Expand ESAS Equipment Tabulation Drawing 28150, Sheet 3	S2-EV-99-0060
99-MP2-44	Crediting Pressure Boundary Integrity of Non-Q Portions of SWS	S2-EV-99-0059
99-MP2-46	ESF Room Sump High Water Level Alarm Switch Upgrade	S2-EV-99-0063
99-MP2-47	MP2 Environmental Conditions for Equipment Qualification, and Specification for MP2 Environmental Qualification Master List and Equipment Qualification Records	S2-EV-99-0064
99-MP2-48	Section 8.7.3.1, Separation	S2-EV-99-0065
99-MP2-49	FSARCR for Section 11.1, Radioactive Waste Processing System	S2-EV-99-0024
99-MP2-50	Update of FSAR Table 5.2-11 and Figure 5.2-31 to change normal position of Valve 2-RC-004	S2-EV-99-0067
99-MP2-51	Exceptions and Justifications for Electrical Separation Specification, SP-M2-EE-0017	S2-EV-99-0068
99-MP2-53	Station Blackout (SBO), Safe Shutdown Scenario Document	S2-EV-99-0050
99-MP2-55	Containment Structure & Containment Isolation Seam Review	S2-EV-99-0074
99-MP2-56	MP2 LTOP Circuitry - Clarify FSAR Description of PORV Block Valves	S2-EV-99-0028
99-MP2-58	MP2 Enclosure Building Post LOCA Relative Humidity	S2-EV-99-0081
99-MP2-59	FSAR Change to Incorporate Recalculated ECCS and AFW Flows into Sections 14.6.5.1 and 14.6.5.2	E2-EV-99-0009
99-MP2-60	Vital Chilled Water System	S2-EV-99-0082

FINAL SAFETY ANALYSIS REPORT CHANGES
(Continued)

<u>FSARCR NUMBER</u>	<u>TITLE</u>	<u>SAFETY EVALUATION</u>
99-MP2-64	Rx Coolant and Liquid Waste PASS	S2-EV-99-0086
99-MP2-68	Hydrogen Monitoring/Post Accident Sampling System Modification	S2-EV-97-0045 R1
99-MP2-68	Containment Air Radiation Monitoring System Up- grade, RM-8123A/B and RM-8262A/B	S2-EV-97-0096 R1
99-MP2-70	Reload Design for Millstone Unit 2 Cycle 13 - Reload Safety Evaluation for Restart to Mode 2 and Mode 1 Operation After Extended Shutdown	E2-EV-99-0007
99-MP2-71	Change Pipe Rupture Dynamic Effects Design Basis-From Double-Ended- Guillotine-Break to Leak- Before-Break (LBB) for the Main Coolant Loop (MCL), Safety Injection (SI), and Shutdown Cooling (SDC) Piping at Millstone Unit 3	S2-EV-98-0312
99-MP2-73	FSAR Change to Incorporate Impact of Increased Paint Thickness on the Containment Analysis	E2-EV-99-0011
99-MP2-77	Miscellaneous Corrections to FSAR Sections on HELB Criteria	S2-EV-99-0111
99-MP2-78	Organizational Change Simplification	S2-EV-99-0106
99-MP2-79	Storms, High Winds and High Tides	S2-EV-99-0098
99-MP2-84	FSARCR 99-MP2-84 for FSAR Section 9.10.2.1 and 9.10.6.2, Site Water Supply System Analysis of Safe Shutdown Systems and Components	S2-EV-99-0100
99-MP2-86	Detector Replacement for RM-8132B, Unit 2 Stack Gas Rad Monitor	S2-EV-99-0126
99-MP2-87	Low Air Flow Alarm Removal For INV-1 Through INV-6	S2-EV-99-0112
99-MP2-97	Revision of Containment Penetrations 6, 7, 8, 9 Valve List from TRM Table 5-1, FSAR Table 5.2-11, FSAR Table 5.2-13 and FSAR Figures 5.2-28 and 30	S2-EV-99-0141

<u>Change Number</u>	<u>Title</u>	<u>SE Number</u>
CALC 98ENG-02609C2 FSARCR 99-MP2-25	Seismic Loads on Containment Base Mat and Walls	S2-EV-98-0260

Description of Change

This calculation documents the structural adequacy evaluation of the containment structures including the base slab, the containment wall, ring girder and dome for the revised seismic analysis results (NU calculation 98-ENG-02771C2, "Coupled Seismic Analysis of Enclosure, Containment, and Auxiliary Building").

Reason for the Change

This calculation verifies the structural adequacy of the Containment structures for revised seismic forces, and revises those portions of the Unit No. 2 Final Safety Analysis Report which are affected by this new calculation.

Safety Evaluation Summary

This activity does not increase the probability of occurrence of a malfunction of equipment important to safety previously evaluated in the Safety Analysis Report (SAR), does not increase the consequence of a malfunction of equipment important to safety previously evaluated in the SAR, and does not create the possibility of a malfunction of a different type than any previously evaluated in the SAR. This activity does not represent an Unreviewed Safety Question and is safe.

<u>Change Number</u>	<u>Title</u>	<u>SE Number</u>
CALC 98-ENG-02424E2 FSARCR 99-MP2-9	Baseline Cable Ampacity Calculation	S2-EV-98-0293

Description of Change

This calculation provides a method to calculate base cable ampacity for power type cables and selected control type cables, used as 120VAC or 125VDC feeders from distribution panels, installed at Millstone Unit No. 2. Revision of the portions of the Unit No. 2 Final Safety Analysis Report (FSAR) affected by this calculation was made.

Reason for the Change

This calculation was performed to provide a method for determining cable ampacities and to include all the power and selected control cable types installed in the plant, and to revise those portions of the FSAR affected by this calculation.

Safety Evaluation Summary

This activity does not increase the probability of occurrence of a malfunction of equipment important to safety previously evaluated in the Safety Analysis Report (SAR), does not increase the consequence of a malfunction of equipment important to safety previously evaluated in the SAR, and does not create the possibility of a malfunction of a different type than any previously evaluated in the SAR. This activity is safe and does not represent an Unreviewed Safety Question.

<u>Change Number</u>	<u>Title</u>	<u>SE Number</u>
CALC PA79-126-01027E2, Rev 1 FSARCR 97-MP2-20	MP2 Emergency Diesel Generator (EDG) Loading Calculation	S2-EV-97-0035

Description of Change

This activity: identifies the predicted loads to be provided power from the Millstone Unit No. 2 Emergency Diesel Generators (EDGs) (H7A and H7B) and evaluates the capability of the EDGs to start and accelerate the needed engineered safety feature and emergency shutdown loads in the required sequence, as required in General Design Criteria 17 and Safety Guide 9; identifies the loads which are automatically sequenced on the EDGs and which are manually added during a Loss of Normal Power (LNP) condition, with or without a Loss of Coolant Accident; and evaluates the addition of Unit No.1 Station Blackout loads to a Unit No. 2 EDG following the completion of sequential loading for a LNP only. This activity also changes those parts of the Unit No. 2 Final Safety Analysis Report (FSAR) affected by this calculation.

Reason for the Change

This change revised Calculation PA79-126-01027E2 to incorporate Calculation Change Notices 01 through 03 and Design Change Notices DM2-S-1333-95 and DM2-S-0052-95, and to change those parts of the FSAR affected by this calculation.

Safety Evaluation Summary

This calculation revision does not involve any changes to the operation of the EDGs or of individual load equipment which is included in the load profile and does not involve any changes in the acceptance criteria for the evaluation of the EDGs' capability to start and accelerate the needed engineered safety feature and emergency shutdown loads.

This calculation revision does not increase the probability of occurrence of a malfunction of equipment important to safety previously evaluated in the Safety Analysis Report (SAR), does not increase the consequence of a malfunction of equipment important to safety previously evaluated in the SAR, and does not create the possibility of a malfunction of a different type than any previously evaluated in the SAR. This activity is safe and does not represent an Unreviewed Safety Question.

<u>Change Number</u>	<u>Title</u>	<u>SE Number</u>
CALC PA79-126-01027E2, Rev.2 FSARCR 99-MP2-42	MP2 EDG Loading Calculation	S2-EV-99-0058

Description of Change

This change to Calculation PA79-126-0127E2 updates the Unit No. 2 Emergency Diesel Generator (EDG) loading based upon revised brake horsepower values for motors, clarifies Low Pressure Safety Injection (LPSI) pump operation for post-Loss of Coolant Accident (LOCA) loading, incorporates Calculation Change Notices 1 through 22. Portions of the Unit No. 2 Final Safety Analysis Report (FSAR) affected by this change were also revised.

Reason for the Change

This change incorporates changes to Unit No. 2 EDG loading resulting from revised brake horsepower values for motors and Calculation Change Notices 1 through 22, and clarifies LPSI pump operation for post-LOCA loading.

Safety Evaluation Summary

The load profile for each of the EDGs was determined in conservative fashion and EDG capability to start and accelerate the needed engineered safety feature and emergency shutdown loads in the required sequence was demonstrated using acceptance criteria based on the requirements included in Safety Guide 9, consistent with the previous revision of the calculation and the descriptions and tables included in the FSAR.

This activity does not increase the probability of occurrence of a malfunction of equipment important to safety previously evaluated in the Safety Analysis Report (SAR), does not increase the consequence of a malfunction of equipment important to safety previously evaluated in the SAR, and does not create the possibility of a malfunction of a different type than any previously evaluated in the SAR. This activity is safe and does not represent an Unreviewed Safety Question.

<u>Change Number</u>	<u>Title</u>	<u>SE Number</u>
DCN DM2-00-1174-97	Machining of Stems of MOVs 2-SI-411 and 2-SI-412 for Installation of a QSS Thrust/Torque Sensor	S2-EV-97-0201

Description of Change

This Design Change Notice (DCN) addresses the machining (removal) of valve stem threads on the High Pressure Safety Injection (HPSI) suction cross-tie valves 2-SI-411 and 2-SI-412 to facilitate the installation of Quick Stem Sensors which will monitor valve thrust/torque in support of Motor Operated Valve maintenance and testing activities.

Reason for the Change

This activity improves the performance of valve maintenance and testing activities.

Safety Evaluation Summary

The valve stem modifications will not affect the operation of the subject valves or impact the ability of these valves to perform their intended safety function. The margin of safety for the HPSI and Emergency Core Cooling Systems has not been changed due to this modification.

This activity does not increase the probability of occurrence of a malfunction of equipment important to safety previously evaluated in the Safety Analysis Report (SAR), does not increase the consequence of a malfunction of equipment important to safety previously evaluated in the SAR, and does not create the possibility of a malfunction of a different type than any previously evaluated in the SAR. This activity does not represent an Unreviewed Safety Question and is safe.

<u>Change Number</u>	<u>Title</u>	<u>SE Number</u>
DM2-00-0281-98 DCR M2-96051 FSARCR 99-MP2-68	Hydrogen Monitoring/Post Accident Sampling System Modification	S2-EV-97-0045 R1

Description of Change

The original Containment Atmosphere Hydrogen Monitoring System (CHMS) was replaced with two trains of new equipment. CHMS is a subsystem of the Engineered Safety Features Hydrogen Control System.

Reason for the Change

The new equipment provides for improved system capability and compliance with NUREG-0737 and Regulatory Guide 1.97 criteria.

Safety Evaluation Summary

This modification provides for improved system capability and compliance with NUREG-0737. There is no increase of the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety as previously evaluated in the Final Safety Analysis Report, nor is there a reduction in the margin of safety. This activity is safe and does not represent an Unreviewed Safety Question.

<u>Change Number</u>	<u>Title</u>	<u>SE Number</u>
DCN DM2-00-0678-98 FSARCR 99-MP2-43	Correct and Expand ESAS Equipment Tabulation Drawing 28150, Sheet 2	S2-EV-99-0060

Description of Change

This Design Change Notice (DCN) involves corrections and enhancements to drawings related to the Engineered Safeguards Actuation System (ESAS). Several Piping and Instrumentation Drawings (P&IDs) were updated to include the associated ESAS signals for equipment whose controls are interlocked with this logic. ESAS schematics were updated to add missing information and clarifications. An ESAS Equipment Tabulation Drawing was expanded into four (4) new drawings. These tabulation drawings were expanded to include Schematics, Actuation Modules, and notes to the associated device number as well as making corrections to existing errors.

Reason for Change

This change makes corrections and enhancements to ESAS related drawings.

Safety Evaluation Summary

The drawing changes and associated Safety Analysis Report figure updates under this DCN do not affect the operation of any safety or non-safety related systems, structures, or components. These changes also do not involve any physical changes to any plant systems. The addition of ESAS related control signals for equipment depicted on the P&IDs does not change the loop function and is in accordance with the current as-built schematics for this equipment.

The changes being introduced by this DCN will not result in any new malfunctions or increase the probability of occurrence or the consequence of an accident or malfunction previously evaluated. No changes to the Operating License or Technical Specifications is required and there will not be a conflict created between any other licensing basis documents.

The changes are safe and do not result in an Unreviewed Safety Question.

<u>Change Number</u>	<u>Title</u>	<u>SE Number</u>
DCN DM2-00-0823-98	Update Schematics Related to ESAS to Include Enhancements and Corrections per CR M2-98-1058	S2-EV-99-0117

Description of Change

This Design Change Notice (DCN) involves corrections and enhancements to Engineered Safeguards Actuation System (ESAS) related drawings.

Reason for the Change

This change corrects identified deficiencies associated with ESAS drawings.

Safety Evaluation Summary

The drawing changes and associated Final Safety Analysis Report figure updates under this DCN do not affect the operation of any safety or non-safety related systems, structures or components. These changes also do not involve any physical changes to any plant systems. The addition of the relay numbers, contact numbers, and contact configuration on ESAS related drawings do not change the loops' function, and the configuration will still be in accordance with the current as-built schematics for the equipment.

This change is safe and does not result in an Unreviewed Safety Question.

<u>Change Number</u>	<u>Title</u>	<u>SE Number</u>
DCN DM2-00-0959-98	Revise CEDS FSAR Fig. 7.4-3 (25203-29155 sh.9 To Reflect Removal of RRS, AWP AND Auto Seq. Input	S2-EV-99-0078

Description of Change

This Design Change Notice (DCN) incorporates previously approved design changes that need to be reflected on Control Element Drive System (CEDS) Functional Block Diagram.

Reason for the Change

Previously approved design changes were not incorporated into the CEDS Functional Block Diagram. This activity is being performed to maintain design basis configuration

Safety Evaluation Summary

The drawing changes will not affect the operation of any safety or non-safety related systems, structures or components. These changes also do not involve any physical changes to any plant systems. The changes being introduced by this DCN will not result in any new malfunctions or increase the probability of occurrence or the consequence of an accident or malfunction previously evaluated. No changes to the Operating License or Technical Specifications are required and there will not be a conflict created between any other licensing basis documents.

The changes are safe and do not result in an Unreviewed Safety Question.

<u>Change Number</u>	<u>Title</u>	<u>SE Number</u>
DCN DM2-00-1164-98 FSARCR 99-MP2-50	Update of FSAR Table 5.2-11 and Figure 5.2-31 to change normal position of Valve 2-RC-003	S2-EV-99-0067

Description of Change

This activity involves revising the position of the Pressurizer Relief Line Sample Control Valve 2-RC-003 in the Final Safety Analysis Report (FSAR) to be in accordance with plant procedures.

Reason for Change

This activity corrects a discrepancy between the valve position (normally closed) as indicated in the FSAR and the valve position (normally open).

Safety Evaluation Summary

This change alters an FSAR Table and diagram to reflect an "as is" valve position and does not adversely affect systems or components, the operation of equipment, or any interfacing systems or components.

This activity does not increase the probability of occurrence or the consequences of a malfunction of equipment important to safety or a previously evaluated accident. nor does it create the possibility of a malfunction or an accident of a different type. The Margin of Safety as defined in the basis of the Technical Specifications is not reduced. This activity does not represent an Unreviewed Safety Question and is safe.

<u>Change Number</u>	<u>Title</u>	<u>SE Number</u>
DCN DM2-00-2053-98 FSARCR 99-MP2-8	SDC Suction Line Potential Overpressurization During LOCA or MSLB	S2-EV-99-0001

Description of Change

This modification installs 2 inches of calcium silicate insulation on approximately 45 feet of the Shutdown Cooling Suction Line (SDC), 12" GBC-1, inside containment between containment isolation valve 2-SI-651 and penetration number 10.

Reason for the Change

The addition of this insulation on the SDC suction line will resolve the Generic Letter 96-06 issue for this line.

Safety Evaluation Summary

This activity addresses the installation of insulation on the section of SDC suction piping between valve 2-SI-651 and penetration 10. This insulation, along with procedurally isolating the piping between valve 2-SI-651 and 2-SI-709 when the temperature is greater than 200 degrees F, will ensure that the suction line does not become overstressed and that containment integrity is maintained. Therefore, the installation of insulation on this line does not increase the probability of occurrence or the consequences of a malfunction of equipment important to safety or a previously evaluated accident. This activity does not create the possibility of a malfunction or an accident of a different type. This activity does not involve an Unreviewed Safety Question and is safe.

<u>Change Number</u>	<u>Title</u>	<u>SE Number</u>
DCN DM2-02-0152-98 DCR M2-97017 FSARCR 98-MP2-175	Cavitating Venturis for AFW Pump Discharge Lines and FSAR Section 14.8.2, Containment Analysis	E2-EV-98-0026

Description of Change

This activity revises the passive failure assumptions described in the Unit No. 2 Final Safety Analysis Report (FSAR).

Reason for the Change

This activity corrects a discrepancy identified in the passive failure assumptions described in the Unit No. 2 FSAR and make this description consistent with Amendment 23 to the Unit No. 2 Facility Operating License.

Safety Evaluation Summary

This change is a document change and has no effect on the reliability, operation or configuration of any plant systems. This activity does not increase the probability of occurrence of a malfunction of equipment important to safety previously evaluated in the Safety Analysis Report (SAR), does not increase the consequence of a malfunction of equipment important to safety previously evaluated in the SAR, and does not create the possibility of a malfunction of a different type than any previously evaluated in the SAR. This activity does not represent an Unreviewed Safety Question and is safe.

<u>Change Number</u>	<u>Title</u>	<u>SE Number</u>
DCN DM2-00-0012-99 FSARCR 99-MP2-51	Exceptions and Justifications for Electrical Separation Specification, SP-M2-EE-0016	S2-EV-99-0068

Description of Change

This Design Change Notice (DCN) will make the following changes to the Electrical Separation Specification, SP-M2-EE-0016, Revision 1:

- a. Add a new paragraph between Specification Sections 2.4.2 and 2.4.3 as follows:
 “Exceptions to these criteria may be permitted on an individual basis with analysis and documentation of acceptability in the Electrical Separation specification. Acceptability of lesser separation should be based on degree of hazard and mitigative measures which demonstrate that the effects of lesser separation do not degrade Class 1E safe shutdown circuits and equipment below an acceptable level. **Each exception to separation requirements shall be evaluated on a 10CFR50.59 Safety Evaluation Form.**” Exceptions cannot be taken between redundant vital wires/devices inside control panels.”
- b. Incorporate the exceptions to separation requirements and their justifications, as Appendices D and E.

Reason for Change

There are instances where it is not feasible to install a physical barrier between the devices of different channels, or to achieve the separation using the established separation criteria. This DCN will make a provision for exceptions to be evaluated, justified and documented under the 10CFR50.59 process on a case-by-case basis for acceptance.

Safety Evaluation Summary

These changes to the Electrical Separation Specification will not increase the probability of occurrence or effect the consequences of any previously evaluated accidents or malfunctions, nor will they create a different type of accident or malfunction than previously evaluated in the Safety Analysis Report. These changes will not impact the Margin of Safety as defined in the design basis. This activity does not represent an Unreviewed Safety Question and is safe.

<u>Change Number</u>	<u>Title</u>	<u>SE Number</u>
DCN DM2-00-0019-99 FSARCR 99-MP2-16	Revised Design Specification for the Pressurizer Main and Auxiliary Spray Piping	S2-EV-99-0009

Description of Change

This Design Change Notice (DCN) modifies the design basis operating conditions for the pressurizer main and auxiliary spray piping by recognizing that steam will be present in the main spray piping at certain times, that the maximum service temperature is higher than originally specified, that certain new thermal conditions and transients have been identified, and that the number of plant heatup and cooldown cycles experienced by the pressurizer spray system has been changed.

Reason for the Change

This change resolves inconsistencies between design and operation by reconciling the design of the pressurizer spray piping system with its actual past and anticipated future operation.

Safety Evaluation Summary

There is no change to functional requirements of the piping or its system operating procedures and these design basis changes do not adversely affect systems or components, the operation of equipment, or any interfacing systems or components. The piping fundamental design conditions (design pressure, temperature, materials, testing, or fabrication) and the engineering design basis Code (ASME Section III, subsection NB) are not impacted.

This activity does not increase the probability of occurrence of a malfunction of equipment important to safety previously evaluated in the Safety Analysis Report (SAR), does not increase the consequence of a malfunction of equipment important to safety previously evaluated in the SAR, and does not create the possibility of a malfunction of a different type than any previously evaluated in the SAR. This activity is safe and does not represent an Unreviewed Safety Question.

<u>Change Number</u>	<u>Title</u>	<u>SE Number</u>
DCN DM2-00-0122-99 FSARCR 99-MP2-20	Enclosure Building Blowout Panels	S2-EV-99-0020

Description of Change

Design Change Record (DCR) M2-98020, Rev. 0 required the blowout panels (in the Enclosure Building) be sealed by applying a bead of low tensile strength caulking to the interior and exterior “bottom end lap” and “side laps” of the panels. At present, only the interior bead has been applied.

This change deletes the exterior caulking requirements as stated in DCR M2-98020, Rev. 0. Design Change Notice (DCN) DM2-00-0122-99 is used to incorporate this change.

Reason for the Change

Since the Enclosure building can maintain the required partial vacuum of 0.25 inches W.G., application of a second bead of caulking to the blowout panel exterior seam is superfluous. The additional caulking will also add to the building maintenance.

Safety Evaluation Summary

The enclosure building completely surrounds the containment above grade. It is a limited leakage steel frame structure designed and constructed to ensure that an acceptable upper limit leakage of radioactive materials to the environment would not be exceeded in the event of a Loss of Coolant Accident. The primary function of the caulking is to assure a degree of airtightness required to maintain a partial vacuum.

A test of the enclosure building was performed with a single bead of caulking applied to the “bottom end lap” and “side laps” of the blowout panels. This verifies that the building can maintain a partial vacuum of 0.25 inches W.G. and that the function of the enclosure building does not diminish by utilizing a single bead of caulking. Therefore, this change does not effect any design basis accident or its consequences. It does not contribute to any new accidents or malfunctions beyond those already analyzed and it does not decrease the Margin of Safety as defined in the basis of any Technical Specifications. This activity is safe and does not present an Unreviewed Safety Question.

<u>Change Number</u>	<u>Title</u>	<u>SE Number</u>
DCN DM2-00-0187-99 FSARCR 99-MP2-34	Modification of CPF Process Radiation Monitor Control Room Annunciator C06, C24B	S2-EV-99-0042

Description of Change

This Design Change Notice (DCN) bypasses annunciator relay K58 in Condensate Polishing Facility (CPF) PNL 2CES-PNL07 for Process Radiation Monitors RM245, RM31, and RM65 common alarm annunciator C06, C24B by determining, moving and reterminating the existing conductors within the panel and repositioning terminal block sliding links; disconnects local PNL07 horn; and wires alarm contact for RM245 directly to the control room panel C06 overhead annunciator.

Reason for the Change

I&C troubleshooting activities indicated that PNL07 microprocessor malfunction gave false alarm signals to the local horn and the annunciator relay, thus masking potential true RM245 alarm annunciators at C06, C24B *Warehouse 5 Process Rad HI/INST Fail*. This activity was performed to improve reliability and insure operability of the 2CNDRM245 alarm annunciator loop only.

Safety Evaluation Summary

This modification improves reliability and insures operation of the Waste Neutralization Sumps Effluent Radiation Monitor RM245 alarm annunciator by removing RM31 and RM65 alarm annunciation capability. RM31 and RM65 have never been used and are not required since the CPF waste evaporator has also never been used. This activity does not increase the probability of occurrence of a malfunction of equipment important to safety previously evaluated in the Safety Analysis Report (SAR), does not increase the consequence of a malfunction of equipment important to safety previously evaluated in the SAR, and does not create the possibility of a malfunction of a different type than any previously evaluated in the SAR. This activity is safe and does not represent an Unreviewed Safety Question.

<u>Change Number</u>	<u>Title</u>	<u>SE Number</u>
DCN DM2-00-0812-99 FSARCR 99-MP2-86	Detector Replacement for RM-8132B, Unit 2 Stack Gas Rad Monitor	S2-EV-99-0126

Description of Change

This Design Change Notice (DCN) describes the replacement of the Unit No. 2 Stack Rad Monitor. The new detector is a beta scintillator type while the existing unit is a Geiger-Mueller (G-M). The Unit No. 2 Final Safety Analysis Report (FSAR) describes the detector type in multiple places and therefore required an update.

Reason for the Change

The failure of the existing G-M detector required replacement with a Beta scintillation type detector, since no G-M types were available. Such a change required updates for FSAR Section 7.5.6.3.2.1.1 and FSAR Table 7.5-6.

Safety Evaluation Summary

The use of a beta scintillation type detector for the gaseous channel radiation monitoring on the Unit No. 2 stack is fully acceptable based on the same use in the two gaseous channels that monitor the Unit No. 2 containment air. This activity does not increase the probability of occurrence of a malfunction of equipment important to safety previously evaluated in the Safety Analysis Report (SAR), does not increase the consequence of a malfunction of equipment important to safety previously evaluated in the SAR, and does not create the possibility of a malfunction of a different type than any previously evaluated in the SAR. This activity is safe and does not represent an Unreviewed Safety Question.

<u>Change Number</u>	<u>Title</u>	<u>SE Number</u>
DCN DM2-00-0856-99	X-64 / X-65 Cooler Modification	S2-EV-99-0139

Description of Change

The change routes the sample flow through coil #3 in cooler X-64 and coil #2 in cooler X-65. Coil #2 in X-64 was retired in place.

Reason for the Change

Due to a leak in one of the cooling coils located in primary sample sink multi-cooler X-64, the cooling coil was routed to a spare coil in cooler X-65.

Safety Evaluation Summary

This change will utilize a spare coil in cooler X-65. Since both coolers X-64 and X-65 were designed and procured to the same specification, the use of the spare coil will not change any design criterion and therefore will not change or increase any probability of occurrence of a malfunction of equipment important to safety. All system functions and operations will remain unchanged. Since tubing and fittings are rated in excess of the operating parameters, the likelihood of any leakage is minimized.

As with the original coils utilized in X-64,, any leakage of the process fluid will leak in the Reactor Building Closed Cooling Water system which is monitored by the inline radiation monitor. Additionally, the sample sink process flow will be isolated during a Containment Isolation Actuation Signal condition; therefore, there is no increase in any consequences of a malfunction of equipment important to safety.

Since the cooling coil being utilized is the same design as the one that had previously developed the leak, incorporation or use of the spare coil will not create a malfunction of a different type than previously evaluated. This activity does not represent an Unreviewed Safety Question and is safe.

<u>Change Number</u>	<u>Title</u>	<u>SE Number</u>
DCR M2-96072 FSARCR 97-MP2-32	Reactor Coolant Post Accident Sampling (PASS) System Modifications and Enhancements	S2-EV-97-0031

Description of Change

This activity makes the following modifications in the Unit No. 2 Post Accident Sampling System (PASS): installs a pressure regulating valve and influent filters upstream of the reactor coolant sample module (RCSM) pH probe sensing element; replaces originally installed 0.375 inch OD tubing with 0.500 inch OD tubing upstream and downstream of the PASS RCSM flowmeter (FE-1067); replaced the 2400 psig rated gas loop transducer with a 3200 psig rated transducer; installs a direct immersion temperature detector in the PASS flow stream; installs a test connection in the influent Reactor Coolant System (RCS) sample line external to the PASS RCSM (to allow for testing of PASS RCSM response with fluids containing above normal operating gas concentrations); and rewires power to the reactor coolant and containment air units of PASS to allow the units to operate (on battery power) in the event of loss of normal power.

Reason for the Change

This activity provides the capability for PASS to measure primary coolant pH at RCS normal operating pressure, to allow PASS operation in the event of loss of normal power, and to enhance the reliability, operation, testing and maintainability of the PASS module.

Safety Evaluation Summary

The PASS modules are non-seismic, non-QA equipment which do not provide a safety function but are required by Regulatory Guide 1.97 and are described in the Final Safety Analysis Report (FSAR) and Technical Specifications. This modification enhances the reliability, operation, testing, and maintainability of the subject PASS module. This modification does not increase the probability of occurrence of a malfunction of equipment important to safety previously evaluated in the Safety Analysis Report (SAR), does not increase the consequence of a malfunction of equipment important to safety previously evaluated in the SAR, and does not create the possibility of a malfunction of a different type than any previously evaluated in the SAR. This activity is safe and does not represent an Unreviewed Safety Question.

<u>Change Number</u>	<u>Title</u>	<u>SE Number</u>
DCR M2-96077 FSARCR 97-MP2-26	Replacement of Inadequate Core Cooling Monitoring System (ICCMS)	E2-EV-97-0002

Description of Change

This Design Change Record (DCR) replaces Inadequate Core Cooling Monitoring System (ICCMS) internal hardware and software with new internal hardware, including: replacing two microprocessors (for Reactor Vessel (RV) level and Saturation) with 1 microprocessor; addition of an ICCMS Trouble Alarm annunciator; addition of individual heater control for the Heated Junction Thermocouple (HJTC) used in monitoring RV level; addition of point bypass capability for failed Unheated Junction Thermocouples (UJTCs) and HJTCs as well as process analog and Core Exit Thermocouple inputs (controlled via a Test Mode/Bypass switch); upgrade of the fiber optic modem data transmission between the ICCMS and the plant process computer to a faster transmission speed and from a "handshake" to a continuous "broadcast" implementation; replacement of the local digital display with a 16 color active matrix flat panel touchscreen serial graphics terminal; and the addition of capability for on-line setpoint changes via a Test Mode/Bypass switch.

Reason for the Change

This change addresses ICCMS obsolescence and reliability concerns.

Safety Evaluation Summary

The replacement of the ICCMS represents an improvement in reliability of the system used to monitor for inadequate core cooling. The design, testing and qualification of the new ICCMS meets or exceeds that of the ICCMS it replaced.

This activity does not increase the probability of occurrence of a malfunction of equipment important to safety previously evaluated in the Safety Analysis Report (SAR), does not increase the consequence of a malfunction of equipment important to safety previously evaluated in the SAR, and does not create the possibility of a malfunction of a different type than any previously evaluated in the SAR. This activity does not represent an Unreviewed Safety Question and is safe.

<u>Change Number</u>	<u>Title</u>	<u>SE Number</u>
DCR M2-97002	MP2-AC-11, Enclosure Building Damper and Ductwork Replacement	S2-EV-97-0034

Description of Change

This Design Change Record (DCR) replaces the existing Enclosure Building Ventilation System exhaust isolation damper, ductwork and associated components with a QA low leakage opposed blade damper, ductwork and associated components.

Reason for the Change

This change enhances isolation damper performance by replacing degraded/deteriorating components.

Safety Evaluation Summary

The replacement damper will have the same operational sequence and modes as the replaced (original) damper. When the replacement (new) damper is in the closed position, the low leakage through the damper will increase the performance of the Enclosure Building Purge System (EBPS) and will also close more quickly, establishing full EBPS flow more quickly.

This activity does not increase the probability of occurrence of a malfunction of equipment important to safety previously evaluated in the Safety Analysis Report (SAR), does not increase the consequence of a malfunction of equipment important to safety previously evaluated in the SAR, and does not create the possibility of a malfunction of a different type than any previously evaluated in the SAR. This activity is safe and does not represent an Unreviewed Safety Question.

<u>Change Number</u>	<u>Title</u>	<u>SE Number</u>
DCR M2-97011 FSARCR 97-MP2-35	Emergency Diesel Generator A and B Pre-Lube, Slow Start and "Ready to Load" Alarm Modification	S2-EV-97-0041

Description of Change

This activity replaces the Unit No. 2 Emergency Diesel Generator (EDG) momentary contact control switches with maintained contact control switches; adds an alarm to alert the operator to secure the EDG pre-lube pump after the engine has stopped; adds two position (Normal/Slow Start), GE SB1 Class1E, maintained contact, key lock, slow start flashing blocking switches in the EDG local control panels C38 and C39; installed Class 1E control relays to multiply speed switch contact; and blocks the diesel engine trip circuit during slow start and reactivates the circuit after the engine reaches 810 rpm and generator voltage is greater than 4025 volts.

Reason for the Change

This activity reduces mechanical stress and wear on the EDG by allowing the monthly surveillance to be performed using a Slow Start.

Safety Evaluation Summary

This activity reduces the mechanical stress and wear on the Emergency diesel engine by revising the control circuit so that the monthly surveillances can be performed using a Slow Start and does not alter any design parameters of the EDG system important to safety. This modification does not increase the probability of occurrence of a malfunction of equipment important to safety previously evaluated in the Safety Analysis Report (SAR), does not increase the consequence of a malfunction of equipment important to safety previously evaluated in the SAR, and does not create the possibility of a malfunction of a different type than any previously evaluated in the SAR. This activity does not represent an Unreviewed Safety Question and is safe.

<u>Change Number</u>	<u>Title</u>	<u>SE Number</u>
DCR M2-97014 FSARCR 98-MP2-18	Pressurizer Pressure Low Range Transmitter Replacement Modification	S2-EV-97-0231

Description of Change

This activity addresses the replacement of the Pressurizer Pressure Low Range Transmitters (PT-103 and PT-103-1).

Reason for the Change

This activity eliminates the high inaccuracies during a design basis accident exhibited by the replaced (old) transmitters, thus reducing instrument harsh environment uncertainties and eliminating sensor manufacturer diversity.

Safety Evaluation Summary

The replacement of the pressurizer pressure low range transmitters does not adversely affect or prevent the Shutdown Cooling from performing its safety function.

This activity does not increase the probability of occurrence of a malfunction of equipment important to safety previously evaluated in the Safety Analysis Report (SAR), does not increase the consequence of a malfunction of equipment important to safety previously evaluated in the SAR, and does not create the possibility of a malfunction of a different type than any previously evaluated in the SAR. This activity is safe and does not represent an Unreviewed Safety Question.

<u>Change Number</u>	<u>Title</u>	<u>SE Number</u>
DCR M2-97033 R1 FSARCR 97-MP2-101 FSARCR 99-MP2-68	Containment Air Radiation Monitoring System Up- grade, RM-8123A/B and RM-8262A/B	S2-EV-97-0096 R1

Description of Change

This Design Change Record (DCR) adds new Class 1E isolation valves (with position indication in the Control Room) to the supply and return of Containment Air Radiation Monitors RM-8123A/B and RM-8262A/B, permanently disconnects the non-safety radiation measuring display, alarm light and horn for particulate and gas monitors, isolates the safety related containment air radiation monitor output from non safety-related recorders (using Class 1E isolation devices), and replaces heat trace and pipe insulation on the sample supply line to the radiation monitors.

Reason for the Change

This change will prevent over pressurization of the radiation monitors immediately following a Loss of Coolant Accident, to replace heat trace and pipe insulation removed during isolation valve installation, and to bypass non-safety related recorders and local displays that are not separated from the safety related portions of their respective circuits.

Safety Evaluation Summary

The additional radiation monitor isolation valves are located outside containment and thus have no effect on containment isolation. The two subject radiation monitors are redundant and cannot both fail as the result of any single failure. This activity does not increase the probability of occurrence of a malfunction of equipment important to safety previously evaluated in the Safety Analysis Report (SAR), does not increase the consequence of a malfunction of equipment important to safety previously evaluated in the SAR, and does not create the possibility of a malfunction of a different type than any previously evaluated in the SAR. This activity is safe and does not represent an Unreviewed Safety Question.

<u>Change Number</u>	<u>Title</u>	<u>SE Number</u>
DCR M2-97037, Rev 1 FSARCR 98-MP2-98 TRMCR 98-2-31	Valves 2-CS-16.1A and B Pressure Locking Modifications	S2-EV-98-0071

Description of Change

This activity installed piping with rupture disks to limit pressure buildup in the bonnet region of Containment Sump Recirculation Valves 2-CS-16.1A and B from reaching levels where inability to open due to pressure locking becomes a concern.

Reason for the Change

This change prevents the possibility of valves 2-CS-16.1A and B experiencing pressure locking post Loss of Coolant Accident before the Sump Recirculation Actuation Signal opens the valves.

Safety Evaluation Summary

This modification does not directly affect valves 2-CS-16.1A and B; nor is there any impact on the design, operability, reliability, or maintenance of these valves. Components and installation meet or exceed the requirements of American Society of Mechanical Engineers (ASME) - Boiler and Pressure Vessel Code - 1971, Section II - Nuclear Power Plant Components, Subsection NC - Requirements for Class 2 Components. This modification does not increase the probability of occurrence of a malfunction of equipment important to safety previously evaluated in the Safety Analysis Report (SAR), does not increase the consequence of a malfunction of equipment important to safety previously evaluated in the SAR, and does not create the possibility of a malfunction of a different type than any previously evaluated in the SAR. This activity is safe and does not represent an Unreviewed Safety Question.

<u>Change Number</u>	<u>Title</u>	<u>SE Number</u>
DCR M2-97055, Rev 2 FSARCR 98-MP2-180 TRMCR 98-2-27	Reroute of Power Cable to Preclude Potential Damage to Appendix R MOV 2-SI-652 and Starter Coil Removal/Installation for MOV 2-SI-651	S2-EV-98-0007

Description of Change

This activity: installs two new power cables, in dedicated conduits, for Motor Operated Valve (MOV) 2-SI-652 (one new cable between MOV 2-SI-652 and inboard penetration SWIB2 and the other new cable between outboard penetration SWXB2 and disconnect switch 89-SI652 in the control room - the existing power cable between outboard penetration SWXB2 and disconnect switch 89-SI652 was spared in the trays while the existing cable from 2-SI-652 and inboard penetration SWIB2 was pulled back from the valve and spared in the tray, with the other end spared in the tray at the penetration box); and removes Motor Control Center open and close coils from MOV 2-SI-651 during plant operation (Modes 1, 2, and 3). The sections of the Final Safety Analysis Report (FSAR) and Technical Requirements Manual (TRM) affected by these changes were also revised.

Reason for the Change

This activity eliminates the chance for a phase to phase hot short involving the power cables for MOV 2-SI-652, to prevent spurious operation of MOV 2-SI-651 due to control cable hot shorts during a fire, and to revise the sections of the FSAR and TRM affected by these changes.

Safety Evaluation Summary

These changes do not affect any FSAR Chapter 14 accidents or events or the consequences of either. The associated mechanical systems will continue to perform their required safety functions during normal operation, postulated accidents, and postulated fire conditions.

These changes do not increase the probability of occurrence of a malfunction of equipment important to safety previously evaluated in the Safety Analysis Report (SAR), do not increase the consequence of a malfunction of equipment important to safety previously evaluated in the SAR, and do not create the possibility of a malfunction of a different type than any previously evaluated in the SAR. This activity is safe and does not represent an Unreviewed Safety Question.

<u>Change Number</u>	<u>Title</u>	<u>SE Number</u>
DCR M2-98013 FSARCR 98-MP2-27 TRMCR 98-2-9	Isolate Steam Generator Blowdown on Low-Low Steam Generator Level	S2-EV-98-0171

Description of Change

This modification adds an interlock for the automatic isolation of the steam generator blowdown on the steam generator low-low water level signal and revises the Unit No. 2 Technical Requirements Manual (TRM) accordingly.

Reason for the Change

This modification provide assurance that the effects of a feedwater transient are bounded by the original feedwater transient analysis and revise the Unit No. 2 TRM accordingly.

Safety Evaluation Summary

This change enhances plant safety by conserving steam generator water level after a steam generator low-low water level signal.

This change does not increase the probability of occurrence of a malfunction of equipment important to safety previously evaluated in the Safety Analysis Report (SAR), does not increase the consequence of a malfunction of equipment important to safety previously evaluated in the SAR, and does not create the possibility of a malfunction of a different type than any previously evaluated in the SAR. This activity is safe and does not represent an Unreviewed Safety Question.

<u>Change Number</u>	<u>Title</u>	<u>SE Number</u>
DCR M2-98020 FSARCR 98-MP2-86	Enclosure Building Blowout Panels	S2-EV-98-0138

Description of Changes

There were two changes associated with this Design Change Record (DCR):

Change 1. Analysis by the safety analysis branch group indicated plant modifications were required to mitigate the consequences of an extended blowdown period. This was required since an assumption of an immediate isolation of the Steam Generator Blowdown line in the event of a postulated High Energy Line Break (HELB) was incorrect. The actual assumption should have been for a manual isolation of 8 hours. The change lowers the release pressure to satisfy the HELBs within the Auxiliary Building.

Change 2. Unit No. 2 Final Safety Analysis Report Section 5.3, "Enclosure Building," Sub-Section 5.3.1, "General Description" specifies a neoprene material to be used for Enclosure Building gaskets. This modification will revise the wording and materials as defined in Sub-Section 5.3.1 so that any suitable elastomer type gasket material that is reviewed by Engineering and determined to meet the design and operational requirements for the application is acceptable.

Reason for the Changes

The increased pressure and temperature caused by a HELB in the blowdown line could exceed the design criteria of the HELB barriers in the Auxiliary Building, thus jeopardizing Electrical Environmental Qualification requirements.

The use of a specific preformed gasket material, namely neoprene, to seal the building joints is overly restrictive.

Safety Evaluation Summary

Decreasing the blowdown area and lowering the activation pressure of the panels did not effect any design basis accidents or its consequences. The panels will not contribute to any new accident or malfunctions beyond those already analyzed. The margin of safety as defined in the Technical Specifications will not decrease.

Replacement gasket materials will be required to meet the fit, form, function requirements of the neoprene it replaces and will require engineering review for use based on design and service conditions. Therefore this change does not effect any design basis accident, or its consequences. It does not contribute to any new accidents or malfunctions beyond those analyzed and will not decrease the margin of safety as defined in the TS. These changes are safe and do not present any Unreviewed Safety Question.

<u>Change Number</u>	<u>Title</u>	<u>SE Number</u>
DCR M2-98028 FSARCR 97-MP2-167	Provide 2-RB-402 Valve Closed Indication in the Control Room	S2-EV-98-0079

Description of Change

This activity adds a seismically mounted limit switch on valve 2-RB-402, a blue and white light for control room indication to confirm valve position upon receipt of Containment Isolation Actuation Signal (CIAS), and changes the valve number from 2-CH-233 to 2-RB-402 in the Final Safety Analysis Report.

Reason for the Change

This activity provides the control room with the means to confirm valve closure on receipt of a CIAS.

Safety Evaluation Summary

This modification provides only valve position indication and does not increase the probability of occurrence of a malfunction of equipment important to safety previously evaluated in the Safety Analysis Report (SAR), does not increase the consequence of a malfunction of equipment important to safety previously evaluated in the SAR, and does not create the possibility of a malfunction of a different type than any previously evaluated in the SAR. This activity is safe and does not represent an Unreviewed Safety Question.

<u>Change Number</u>	<u>Title</u>	<u>SE Number</u>
DCR M2-98052 FSARCR 98-MP2-151 TRMCR 98-2-29	Shutdown Cooling Overpressurization Protection	S2-EV-98-0178

Description of Change

This activity: replaced the three existing High Pressure Safety Injection (HPSI) pump control switches with control switches possessing a pull to lock feature; modified the pump control logic such that the placement of the HPSI pump control switch in the pull to lock position illuminates the associated indicator light (indicating that protective features are bypassed); and installed a new annunciator window that alarms whenever two of any three HPSI pump control switches are in the pull to lock position.

Reason for the Change

This activity corrects a design flaw which could lead to the overpressurization of the Shutdown Cooling (SDC) system, resulting from the inadvertent initiation of a HPSI pump while the SDC system is in operation and the HPSI pump is not adequately vented.

Safety Evaluation Summary

This activity involves modifications associated with the HPSI pumps' control circuits. Failures associated with the replacement control switches result in the same consequences as those associated with the old switches. Failures resulting in an inadvertent safety injection signal in Mode 4 while aligned to Shutdown Cooling will not result in the automatic start of any HPSI pumps. This modification does not increase the probability of occurrence of a malfunction of equipment important to safety previously evaluated in the Safety Analysis Report (SAR), does not increase the consequence of a malfunction of equipment important to safety previously evaluated in the SAR, and does not create the possibility of a malfunction of a different type than any previously evaluated in the SAR. This activity does not represent an Unreviewed Safety Question and is safe.

<u>Change Number</u>	<u>Title</u>	<u>SE Number</u>
DCR M2-98055 FSARCR 98-MP2-169	Repowering of 2-SI-651, 2-CH-517, and 2-CH-517 for Boron Precipitation Control	S2-EV-98-0222

Description of Change

This Design Change Record (DCR) allows power to be transferred from either power train (Z1 or Z2) to the other to allow power to be maintained to operate valves (2-SI-651, 2-CH-517, and 2-CH-517) required for Low Pressure Safety Injection (LPSI) and High Pressure Safety Injection (HPSI) methods of boron precipitation control. This transfer of power is accomplished via mechanically interlocked disconnect switches, the addition of control panel C530 (which provides local control for 2-SI-651), and the addition of test jacks to determine the position of LPSI header injection valves.

Reason for the Change

This change resolves concerns about the susceptibility of boron precipitation control to single failure.

Safety Evaluation Summary

This change provides power to the subject valves from either the Facility Z1 or Facility Z2 power trains, thus eliminating single failure concerns regarding loss of either power train. This activity does not increase the probability of occurrence of a malfunction of equipment important to safety previously evaluated in the Safety Analysis Report (SAR), does not increase the consequence of a malfunction of equipment important to safety previously evaluated in the SAR, and does not create the possibility of a malfunction of a different type than any previously evaluated in the SAR. This activity is safe and does not represent an Unreviewed Safety Question.

<u>Change Number</u>	<u>Title</u>	<u>SE Number</u>
DCR M2-98067 FSARCR 98-MP2-179 TRMCR 98-2-26	Hot Short Mods for MOVs 2-MS-65A and 2-MS-65B	S2-EV-98-0238

Description of Change

This activity revises operating procedures to remove and then re-install the opening coils for Motor Operated Valves (MOV) 2-MS-65A and 2-MS-65B (bypass valves for the main steam isolation valves). The portions of the Final Safety Analysis Report (FSAR) and Technical Requirements Manual (TRM) affected by these changes were also revised.

Reason for the Change

This activity prevents spurious operation of MOVs 2-MS-65A and 2-MS-65B during a fire due to potential control cable hot shorts and to revise those portions of the FSAR and TRM affected by these changes.

Safety Evaluation Summary

These changes do not increase the probability of occurrence of a malfunction of equipment important to safety previously evaluated in the Safety Analysis Report (SAR), do not increase the consequence of a malfunction of equipment important to safety previously evaluated in the SAR, and do not create the possibility of a malfunction of a different type than any previously evaluated in the SAR. This activity does not represent an Unreviewed Safety Question and is safe.

<u>Change Number</u>	<u>Title</u>	<u>SE Number</u>
DCR M2-98084 FSARCR 98-MP2-177	Addition of Ventilated Cable Tray Covers and Sil-temp to MP2	S2-EV-98-0290

Description of Change

This activity installs ventilated tray covers and/or Sil-Temp cable wrap barriers to cable trays and cables, as required, to maintain vital circuit separation in accordance with Specification SP-M2-EE-016, Revision 1, "Electrical Separation Specification - Millstone Unit 2" and updates those portions of the Unit No. 2 Final Safety Analysis Report (FSAR) affected by this activity.

Reason for the Change

This activity resolves discrepancies identified with compliance with Specification SP-M2-EE-016, Revision 1, and updates the FSAR accordingly.

Safety Evaluation Summary

Ventilated tray covers and Sil-Temp cable wrap barriers have been found to be acceptable methods of maintaining cable separation. Their use does not increase the probability of occurrence of a malfunction of equipment important to safety previously evaluated in the SAR, does not increase the consequence of a malfunction of equipment important to safety previously evaluated in the SAR, and does not create the possibility of a malfunction of a different type than any previously evaluated in the SAR. This activity is safe and does not represent an Unreviewed Safety Question.

<u>Change Number</u>	<u>Title</u>	<u>SE Number</u>
DCR M2-98087 FSARCR 99-MP2-37	Mid-Cycle 13 SPDS Upgrade	S2-EV-98-0273

Description of Change

This Design Change Record (DCR) implements an interim Safety Parameter Display System (SPDS) and modifies the SPDS software to be consistent with revised Emergency Operating Procedures (EOPs) and to support an upgrade to the man-machine interface (MMI) installed on the Plant Process Computer (PPC). Portions of the Unit No. 2 Final Safety Analysis Report affected by this change were also appropriately revised.

Reason for the Change

This activity supports the transition between current EOPs and new EOPs based on CEN 152, Revision 3 and to upgrade the MMI to provide increased capability and flexibility.

Safety Evaluation Summary

The SPDS is designed to complement the EOPs and is not necessary for their execution. The SPDS will be used during emergency conditions as a concentrated data source that allows the operators to obtain desired information and maintain an understanding of the overall plant conditions. The SPDS does not directly affect the operation of any plant component nor will it cause any plant transient, since the SPDS is isolated from any safety grade equipment.

This activity does not increase the probability of occurrence of a malfunction of equipment important to safety previously evaluated in the Safety Analysis Report (SAR), does not increase the consequence of a malfunction of equipment important to safety previously evaluated in the SAR, and does not create the possibility of a malfunction of a different type than any previously evaluated in the SAR. This activity does not represent an Unreviewed Safety Question and is safe.

<u>Change Number</u>	<u>Title</u>	<u>SE Number</u>
DCR M2-98089 FSARCR 98-MP2-181 TRMCR 98-2-28	MOV 2-MS-202 Close Coil Removal Document Update	S2-EV-98-0269

Description of Change

This activity revises the Unit No. 2 Final Safety Analysis Report (FSAR), Technical Requirements Manual (TRM), Piping and Instrumentation Drawings (P&IDs), and logic and schematic diagrams to show and discuss the close coil removal for the #2 Steam Generator to Auxiliary Feedwater Pump Turbine Steam Supply Valve (MOV 2-MS-202).

Reason for the Change

This activity adds necessary detail to the Unit No. 2 FSAR, TRM, P&IDs, and logic and schematic diagrams to show and discuss the close coil removal for MOV 2-MS-202.

Safety Evaluation Summary

MOV 2-MS-202 was previously identified as a valve which was susceptible to spurious operation due to hot shorts. Removal of the closing coil provides assurance that the valve will remain open during or following a fire, so that steam remains available to the auxiliary feedwater pump turbine. This activity does not increase the probability of occurrence of a malfunction of equipment important to safety previously evaluated in the Safety Analysis Report (SAR), does not increase the consequence of a malfunction of equipment important to safety previously evaluated in the SAR, and does not create the possibility of a malfunction of a different type than any previously evaluated in the SAR. This activity does not represent an Unreviewed Safety Question and is safe.

<u>Change Number</u>	<u>Title</u>	<u>SE Number</u>
DCR M2-98092 FSARCR 98-MP2-199	Spent Fuel Pool Refueling Analysis	S2-EV-98-0307

Description of Change

This activity revises the design basis of the Spent Fuel Pool (SFP) system and refueling analysis and changes the Unit No. 2 Final Safety Analysis Report Section 9.5 to provide for an emergency full core offload during Cycle 13.

Reason for the Change

This activity supports the restart (Mode 2) of Unit No. 2 from the extended outage.

Safety Evaluation Summary

This activity documents that the existing 140° F Technical Specification temperature for SFP is adequate, provided that 256 hours of decay time has passed (after reactor shutdown) prior to moving fuel from the core to the SFP. This activity does not increase the probability of occurrence of a malfunction of equipment important to safety previously evaluated in the Safety Analysis Report (SAR), does not increase the consequence of a malfunction of equipment important to safety previously evaluated in the SAR, and does not create the possibility of a malfunction of a different type than any previously evaluated in the SAR. This activity does not represent an Unreviewed Safety Question and is safe.

<u>Change Number</u>	<u>Title</u>	<u>SE Number</u>
DCR M2-98094 FSARCR 99-MP2-19	Back-up Air Bottle Supply Upgrade to Hydrogen Monitoring System CIVs	S2-EV-98-0303

Description of Change

This Design Change Record (DCR) replaces Instrument Air System back-up air supply bottles, valves, and tubing to air operated Containment Isolation Valves (CIVs) 2-EB-88, 2-AC-12, 2-AC-15, 2-AC-20, 2-AC-47, as well as the back-up air bottle supplies to air operated valves 2-CH-517, 2-CH-518, and 2-CH-519, with upgraded safety related Quality Assurance Category 1 bottles and associated components.

Reason for the Change

This change was made to address the single failure vulnerability of the Post-Incident Hydrogen Control/Post Accident Sampling System following a Loss of Coolant Accident.

Safety Evaluation Summary

Upgrade of the back-up air supplies to safety related status and the installation of an additional safety related swing bottle will ensure post-accident operability of the CIVs enabling the Hydrogen Monitoring System to operate as required.

This activity does not increase the probability of occurrence of a malfunction of equipment important to safety previously evaluated in the Safety Analysis Report (SAR), does not increase the consequence of a malfunction of equipment important to safety previously evaluated in the SAR, and does not create the possibility of a malfunction of a different type than any previously evaluated in the SAR. This activity is safe and does not represent an Unreviewed Safety Question.

<u>Change Number</u>	<u>Title</u>	<u>SE Number</u>
DCR M2-98095 FSARCR 99-MP2-15	TDAFP Redundant Power Supply	S2-EV-99-0011

Description of Change

This Design Change Record (DCR) implements modifications to the turbine driven auxiliary feedwater pump (TDAFP) consisting of installing a redundant DC power feed to the speed control motor circuit and steam inlet valve MOV 2-MS-464.

Reason for the Change

this activity satisfies the design basis single failure criteria for a Loss of Normal Feedwater (LONF) event and thus meet the revised loss of normal feedwater safety analysis.

Safety Evaluation Summary

The TDAFP redundant DC power feed modification satisfies Appendix R safe shutdown capability requirements to ensure the availability of the TDAFP in the event of a fire. This modification does not affect operation of the TDAFP during a Station Blackout event. The replacement and reroute of TDAFP cable does not impact the ability of the TDAFP to perform accident mitigating functions and does not degrade safety barriers. These modifications do not introduce any accident initiators, alter any fission product barriers or reduce the ability of any safety system to perform its accident mitigation function, and thus will not cause a dose release to impact the margin of safety as defined in the Technical Specification. Therefore, these changes are safe and do not represent an Unreviewed Safety Question.

<u>Change Number</u>	<u>Title</u>	<u>SE Number</u>
DCR M2-98096 FSARCR 99-MP2-46	ESF Room Sump High Water Level Alarm Switch Upgrade	S2-EV-99-0063

Description of Change

This Design Change Record (DCR) replaces the Engineering Safety Feature (ESF) room sump high water level alarm switches LS-9167, LS-LS-9173, and LS-9179 with new switches that are environmentally and seismically qualified for the normal and expected post accident harsh environment in the ESF rooms and also modifies, as necessary, the conduit runs located between the level alarm switches and the safety related cable trays that carry the level alarm switch instrument cables to the main control room.

Reason for Change

This change upgrades the capability to detect and isolate the worst passive failure in an ESF room (a leak equivalent to a High Pressure Safety Injection (HPSI) pump seal failure).

Safety Evaluation Summary

The activities under this DCR do not require a revision to the operating license or Technical Specifications. The activities will not increase the probability of occurrence of a malfunction, increase the consequences of a malfunction, or create the possibility of a different type of malfunction than those previously evaluated. The activities will not increase the probability of occurrence of an accident, increase the consequences of an accident, or create the possibility of a different type of accident. The activities will not reduce the margin of safety as defined in the basis for any Technical Specification. This activity does not represent an Unreviewed Safety Question and is safe.

<u>Change Number</u>	<u>Title</u>	<u>SE Number</u>
DCR M2-98098 FSARCR 99-MP2-14	Reactor Coolant Post Accident Sampling System Total Dissolved Gas	S2-EV-99-0002

Description of Change

The provision to measure total dissolved gas (TDG) via the Reactor Coolant System Post Accident Sampling System (RCS PASS) has been eliminated. This is a revision to documentation only. The TDG measurement is not and never was identified in Unit No. 2 procedures to be used to direct operator actions, make post accident management decisions or perform offsite dose evaluations.

Reason for the Change

This change eliminates the requirement to measure TDG from affected documents.

Safety Evaluation Summary

The proposed elimination of the TDG measurement from the RCS PASS has been reviewed and has no impact on safety. The TDG measurement is not, nor was ever, identified in Unit No. 2 procedures to be used to direct operator actions, make post accident management decisions or perform off-site dose evaluations. The RCS PASS is not relied upon to monitor for indications of potential voiding in the RCS.

The RCS PASS is non-seismic, non-QA equipment which does not provide a safety function. The elimination of the requirement to perform post-accident TDG measurement is a documentation change only. No hardware modifications to the system have been performed. The capability of the RCS PASS to obtain gas samples for laboratory analysis is not affected.

The elimination of the TDG measurement from the RCS PASS (both in-line and backup sampling and laboratory analysis) does not increase the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report, nor does it create the possibility for an accident or malfunction of a different type than previously evaluated in the safety analysis report. The margin of safety as defined in the basis for any Technical Specification is not reduced. The elimination of the TDG measurement from the RCS PASS is safe and does not constitute an Unreviewed Safety Question.

<u>Change Number</u>	<u>Title</u>	<u>SE Number</u>
DCR M2-98105	Replacement of Pressurizer Spray Header Piping	S2-EV-99-0017

Description of Change

This activity replaces, reanalyzes pipe stress and resupports Pressurizer Main Spray / Auxiliary Spray Lines 4"-CCA-11, 3"-CCA-11, 2"-CCA-12 and ¾"-CCA-11 in containment, from the Pressurizer spray nozzle safe end to the header piping outside the blockhouse.

Reason for the Change

An evaluation of the fatigue design compliance for past duty cycles showed that the cumulative fatigue usage exceeded the ASME Code allowable limit of 1.0 for portions of the pressurizer main and auxiliary spray piping. As a result it became necessary to replace fatigue degraded portions of the pressurizer main and auxiliary spray piping.

Safety Evaluation Summary

Pressurizer Main Spray / Auxiliary Spray lines 4"-CCA-11, 3"-CCA-11, 2"-CCA-12 and ¾"-CCA-11, have been replaced, reanalyzed and resupported in accordance with the Unit No. 2 design criteria. The analysis and reviews have shown that there is no change to functional requirements of the piping or its system operating procedures. The changes do not adversely affect systems or components, the operation of equipment, or any interfacing systems or components. The piping fundamental design conditions (design pressure, temperature, materials, testing and fabrication) and the engineering design basis Code (ASME Section III, subsection NB) are not impacted.

This activity does not increase the probability of occurrence or the consequences of a malfunction of equipment important to safety or a previously evaluated accident. This activity does not create the possibility of a malfunction or an accident of a different type. The Margin of Safety as defined in the basis of the Technical Specifications is not reduced. Therefore, this activity does not involve an Unreviewed Safety Question and is safe.

<u>Change Number</u>	<u>Title</u>	<u>SE Number</u>
DCR M2-98106 FSARCR 99-MP2-22	2-AC-11 Single Failure Vulnerability	S2-EV-99-0022

Description of Change

This Design Change Record (DCR) modifies the Main Exhaust Ventilation Fan control circuit logic to trip on receipt of a Containment Isolation Actuation Signal (CIAS) (2 out of 4 high containment pressure or 2 out of 4 low pressurizer pressure) diverse from the CIAS which trips shut ventilation damper 2-AC-11.

Reason for the Change

This modification addresses the single failure vulnerability of ventilation damper 2-AC-11.

Safety Evaluation Summary

This change removes the single failure vulnerability of ventilation damper 2-AC-11. This activity does not increase the probability of occurrence of a malfunction of equipment important to safety previously evaluated in the Safety Analysis Report (SAR), does not increase the consequence of a malfunction of equipment important to safety previously evaluated in the SAR, and does not create the possibility of a malfunction of a different type than any previously evaluated in the SAR. This activity is safe and does not represent an Unreviewed Safety Question.

<u>Change Number</u>	<u>Title</u>	<u>SE Number</u>
DCR M2-99005 FSARCR 99-MP2-26	Auxiliary and Main Feedwater Control and Isolation Issues	S2-EV-99-0012

Description of Change

This Design Change Record (DCR) revises the Auxiliary Feedwater (AFW) and Main Feedwater (FW) design bases by changing the time to isolate AFW to the affected Steam Generator from 10 to 30 minutes for the Main Steam Line Break (MSLB) inside containment and the High Energy Line Break (HELB) outside containment upstream of the Main Steam Isolation Valve; modifying the power supply to the AFW turbine-driven pump to be powered from either the Z1 or Z2 facility; upgrades the back-up air to the AFW regulating valves (2-FW-43A/B) to safety related; provides for a high temperature trip of fan F-158 which normally ventilates the Turbine Driven Auxiliary Feedwater Pump room; Equipment Environmental Qualification (EEQ) qualifying the AFW cross-tie Motor Operated Valve (2-FW-44) and the AFW regulating Air Operated Valves (2-FW-43A/B) for the HELB environment following a steam line break in the Turbine Building; and EEQ qualifying the main feedwater regulating valves (2-FW-51A/B) and bypass valves (2-FW-41A/B) to isolate on a Main Steam Isolation Signal for the HELB environment following a steam line break in the Turbine Building.

Reason for the Change

These changes to AFW and FW design bases were made in response to several Condition Reports and selected Licensee Event Reports.

Safety Evaluation Summary

These design bases changes ensure that AFW pumps will be available assuming a single failure following a Loss of Normal Feedwater and that the affected steam generator following a MSLB or HELB can be isolated considering single failures and the HELB environment. This activity does not increase the probability of occurrence of a malfunction of equipment important to safety previously evaluated in the Safety Analysis Report (SAR), does not increase the consequence of a malfunction of equipment important to safety previously evaluated in the SAR, and does not create the possibility of a malfunction of a different type than any previously evaluated in the SAR. This activity does not represent an Unreviewed Safety Question and is safe.

<u>Change Number</u>	<u>Title</u>	<u>SE Number</u>
DCR M2-99006 FSARCR 99-MP2-30	Backup Air Bottle Supply Upgrade to Auxiliary Feedwater Regulating Valves	S2-EV-99-0027

Description of Change

Non-safety related (non-Q) Instrument Air System (IA) back-up air supply bottles, valves and tubing to air operated Auxiliary Feedwater Regulating Valves (2-FW-43A and 2-FW-43B) were removed and replaced by upgraded safety related, QA Category 1, bottles and associated components.

Reason for the Change

Upgrade of the existing backup air supplies to safety related status will ensure post accident operability of the regulating valves enabling the Auxiliary Feedwater System to operate as required.

Safety Evaluation Summary

The modification does not result in any increase in the probability or consequences of any malfunctions or accidents involving equipment important to safety. This change does not result in the creation of a malfunction or accident of a different type than previously evaluated. This change ensures that the post-accident operation of required systems, as described in the basis of the Technical Specifications, is protected. This activity is safe and does not result in an Unreviewed Safety Question.

<u>Change Number</u>	<u>Title</u>	<u>SE Number</u>
DCR M2-99014 FSARCR 99-MP2-31	Containment Spray Nozzle Replacement	S2-EV-99-0019

Description of Change

Sixty-four (64) of 194 spray nozzles in the containment spray system (CSS) were replaced, and one nozzle was plugged.

Reason for the Change

This activity is necessary to ensure that the Net Positive Suction Head (Absolute) (NPSH) is greater than the Net Positive Suction Head (Required) (NPSH) for the containment spray pumps during accident conditions.

Safety Evaluation Summary

The spray nozzles are only called upon to function in the event of a design basis accident for the purposes of mitigating the containment pressure and temperature rise and for removal of fission products from the containment atmosphere. The nozzles are a passive part of the containment spray system and the only means by which they could malfunction is through clogging which is prevented by the sump screens. The replacement nozzles and fittings are made of stainless steel which is compatible with the spray ring and nipple materials. Foreign Material Exclusion Area (FMEA) controls prevent any foreign material from entering the system during installation. Therefore, there is no change in the potential for clogging and thus no change in the ability of the containment temperature and pressure rise and reducing containment atmosphere fission product concentrations.

The replacement of 64 and plugging of 1 of the containment spray nozzles, performed under this Design Change Record, cannot increase the radiological consequences due to a malfunction of safety related equipment already evaluated in the Safety Analysis Report.

The replacement of 64 of the containment spray nozzles and capping of one nozzle is determined to be safe and does not involve an Unreviewed Safety Question.

<u>Change Number</u>	<u>Title</u>	<u>SE Number</u>
DCR M2-99019 FSARCR 99-MP2-70	Reload Design for Millstone Unit 2 Cycle 13 - Reload Safety Evaluation for Restart to Mode 2 and Mode 1 Operation After Extended Shutdown	E2-EV-99-0007

Description of Change

Reactor core isotopics, fuel mechanical integrity, and changes to the plant design, Technical Specifications, and Core Operating Limits Report (COLR) related to the Safety Analysis were evaluated to justify the acceptability, with regard to the Cycle 13 core design and Safety Analysis, of Unit No. 2 to restart and operation up to and including Mode 1 conditions following the mid-Cycle 13 extended shutdown.

Reason for the Change

This activity is necessary to ensure the acceptability, with regard to the Cycle 13 core design and Safety Analysis, of Unit No. 2 to restart and operation up to and including Mode 1 conditions following the mid-Cycle 13 extended shutdown.

Safety Evaluation Summary

The main concerns of the mid-Cycle 13 extended shutdown are the integrity of the fuel and the decay/buildup of the isotopics in the core.

During the mid-Cycle 13 extended shutdown, a full core offload was performed to support the repair of the low pressure safety injection valve 2-SI-645. The reload of the full core was completed and verified. The loading pattern is identical to the one established prior to the extended shutdown; therefore, the core is expected to meet the limits of Technical Specifications and the COLR. Isotopic decay and buildup resulting from the extended shutdown do not significantly affect the nuclear design characteristics of the reactor core and the safety of the plant is not affected.

This activity does not increase the probability of occurrence of a malfunction of equipment important to safety previously evaluated in the Safety Analysis Report (SAR), does not increase the consequence of a malfunction of equipment important to safety previously evaluated in the SAR, and does not create the possibility of a malfunction of a different type than any previously evaluated in the SAR. This activity is safe and does not represent an Unreviewed Safety Question.

<u>Change Number</u>	<u>Title</u>	<u>SE Number</u>
MMOD M2-99007 FSARCR 99-MP2-27 TRMCR 99-2-3	Add (Appendix J) Drain Isolation Valve to 1"CCB-5	S2-EV-99-0032

Description of Change

This modification adds a second ASME Section III, Class 2, one inch drain isolation gate valve to a maintenance drain line (1"-CCB-5).

Reason for the Change

Installation of an additional drain isolation valve to achieve double valve isolation of the drain line will allow exemption of the drain line isolation valves from the Appendix J, type C leak testing requirement.

Safety Evaluation Summary

Implementation of the subject Minor Modification (MMOD) is safe based on the analysis contained in the calculations that are referenced in the MMOD. The addition of a new, ASME III, Class 2 isolation valve downstream of the existing drain line isolation valve reduces the probability of occurrence of a loss of containment pressure boundary integrity. There is no increase in the probability of occurrence or consequences of accidents previously evaluated in the Safety Analysis Report as a result of this modification and the margin of safety provided in the basis for the Technical Specifications is not affected. This modification is safe and is not an Unreviewed Safety Question.

<u>Change Number</u>	<u>Title</u>	<u>SE Number</u>
MMOD M2-99008	EBFS Area Fire Detection Zone Addition	S2-EV-99-0023

Description of Change

This modification addresses the addition of smoke detectors in the Enclosure Building Filtration System (EBFS) area to support compliance with National Fire Protection Association codes and NU's Fire Protection Program.

Reason for the Change

The addition of the detectors to the physical plant satisfies Appendix R requirements as delineated in Generic Letter 86-10 and Millstone Technical Evaluation FP-EV-98-0006, Rev. 1. The new detectors will ensure smoke detection devices adequately cover the EBFS area and the safe shutdown equipment and cables in the area.

Safety Evaluation Summary

The addition of the new fire detection zone does not affect any Design Basis Accidents or the consequences of these accidents. The new detectors do not contribute to any new accidents beyond those analyzed in the Final Safety Analysis Report. The modification does not increase the probability of an accident or malfunction, increase the consequences of an accident or affect accident mitigation. This modification will not affect the health and safety of the public. The modification is safe and does not present an Unreviewed Safety Question.

<u>Change Number</u>	<u>Title</u>	<u>SE Number</u>
MMOD M2-99023	Installation of Carbon Filtration System for the Turbine Building and Auxiliary Feedwater Pump Sumps	S2-EV-99-0073

Description of Change

This modification replaces the existing temporary carbon filter processing system with a new permanent charcoal filter processing system located downstream of all sump pumps to allow filtering of all the effluent from the Turbine Building prior to release.

Reason for Change

This change allows more efficient treatment/filtration of the Unit No. 2 Turbine Building sumps and Auxiliary Feedwater (AFW) sumps being discharged to the environment during all modes of operation.

Safety Evaluation Summary

Enhancement of the Turbine Building sump and AFW pump sump systems (non safety related) by installing a charcoal filter upstream of the oil-water separator No. 2, resulting in the filtration of all the Hydrazine/Chlorine drain water collections inside the Turbine Building, does not result in any increases to the probability or consequences of an accident or malfunction and does not reduce the margin of safety as defined in the bases for any existing technical specification. This activity does not represent an Unreviewed Safety Question and is safe.

<u>Change Number</u>	<u>Title</u>	<u>SE Number</u>
MMOD M2-99027	Bonnet Seal Enhancements for Motor Operated Valve 2-SI-652	S2-EV-99-0085

Description of Change

The modifications considered by this Minor Modification (MMOD) control leakage by plugging the four “knockout” holes and by adding a diaphragm seal spanning the gap between the valve bonnet and the upper valve neck yoke mounting flange of shutdown cooling system (SDC) suction isolation valve 2-SI-652.

Reason for the Change

Plugging the four “knockout” holes and installing the U-shaped diaphragm seal in the trough above the split gasket retainer will supplement the existing bonnet pressure seal to eliminate the existing lower and potential upper leak paths.

Safety Evaluation Summary

The diaphragm seals to be added to 2-SI-652 will not affect the ability of the valve to perform its intended safety functions during normal or accident conditions. The modifications will not contribute to any accidents beyond those already analyzed. The modifications eliminate the existing lower and potential upper leak paths. They will not jeopardize any safety related equipment. The safety and health of the public have not been compromised, and the margin of safety will remain the same. This modification is safe and does not constitute an Unreviewed Safety Question.

<u>Change Number</u>	<u>Title</u>	<u>SE Number</u>
MMOD M2-99036 FSARCR 99-MP2-87	Low Air Flow Alarm Removal For INV-1 Through INV-6	S2-EV-99-0112

Description of Change

This Minor Modification (MMOD) disables the “Low Air Flow” alarm contacts that actuate the common annunciators “Inverter INV-1/2/3/4/5/6 Trouble” and rewires terminal blocks to disable the low air flow alarm input for inverters 5 and 6.

Reason for the Change

This modification eliminates nuisance alarms associated with the air flow detectors, which result in an unnecessary operator burden and at times a continuous distraction in responding to the control room trouble alarms.

Safety Evaluation Summary

This activity allows the bypass of low air flow annunciator inputs to the common annunciators “Inverter INV-1/2/3/4/5/6 Trouble” - all other inputs to these common annunciators remain unaffected. This activity eliminates a condition which could mask other genuine inputs to these common annunciators.

This activity does not increase the probability of occurrence of a malfunction of equipment important to safety previously evaluated in the Safety Analysis Report (SAR), does not increase the consequence of a malfunction of equipment important to safety previously evaluated in the SAR, and does not create the possibility of a malfunction of a different type than any previously evaluated in the SAR. This activity is safe and does not represent an Unreviewed Safety Question.

<u>Change Number</u>	<u>Title</u>	<u>SE Number</u>
MMOD M2-99048	RCP Seal Controlled Bleed-off Relief Valve Replacement	S2-EV-99-0133

Description of Change

This Minor Modification (MMOD) involves removal of “retired in place” flow switch FS-2038 and replacement of Reactor Coolant Pump controlled bleed-off relief valve 2-CH-199 with a hard faced seat, flanged design valve.

Reason for the Change

This MMOD replaces a valve with historical leakage past its seat.

Safety Evaluation Summary

This activity involves the replacement of a previously retired-in-place flow switch assembly with a pipe section and incorporation of a hard faced seat, flanged relief valve design to replace an existing welded relief valve. The changes remain independent of external power (control air/power) and operate in the same manner (relief valve opens when upstream pressure is applied and shuts when pressure is reduced) such that there is no new failure mode, nor possibility of a malfunction of a different type.

This activity does not increase the probability of occurrence of a malfunction of equipment important to safety previously evaluated in the Safety Analysis Report (SAR), does not increase the consequence of a malfunction of equipment important to safety previously evaluated in the SAR, and does not create the possibility of a malfunction of a different type than any previously evaluated in the SAR. This activity is safe and does not represent an Unreviewed Safety Question.

<u>Change Number</u>	<u>Title</u>	<u>SE Number</u>
TRMCR 99-2-1	TRM Change to Incorporate New Linear Heat Generation Rate in Cycle 13 Core Operating Limits Report Due to Revision of Small Break LOCA Analysis	S2-EV-99-0038

Description of Change

This activity revises the Cycle 13 Core Operating Limits Report (COLR) section of the Technical Requirements Manual (TRM) to incorporate requirements supporting the most recent small break Loss of Coolant Accident (LOCA) analyses and make editorial corrections.

Reason for the Change

This activity incorporates requirements supporting the most recent small break LOCA analyses and make editorial corrections in the Cycle 13 COLR section of the TRM.

Safety Evaluation Summary

This change to the Unit No. 2 COLR has no adverse effect on plant operation or accident mitigation equipment and does not change plant response to design basis accidents.

This change does not increase the probability of occurrence of a malfunction of equipment important to safety previously evaluated in the Safety Analysis Report (SAR), does not increase the consequence of a malfunction of equipment important to safety previously evaluated in the SAR, and does not create the possibility of a malfunction of a different type than any previously evaluated in the SAR. This activity is safe and does not represent an Unreviewed Safety Question.

<u>Change Number</u>	<u>Title</u>	<u>SE Number</u>
TRMCR 99-2-2	Additional Requirements, Fire Protection System	S2-EV-99-0047

Description of Change

This activity corrects minor errors concerning locations of various fire detection and suppression components identified in the Unit No. 2 Technical Requirements Manual (TRM).

Reason for the Change

This activity corrects errors identified in the Unit No. 2 TRM.

Safety Evaluation Summary

This change to the Unit No. 2 TRM is administrative in nature and does not involve any changes to plant equipment or to the operation of that equipment.

This TRM revision does not increase the probability of occurrence of a malfunction of equipment important to safety previously evaluated in the Safety Analysis Report (SAR), does not increase the consequence of a malfunction of equipment important to safety previously evaluated in the SAR, and does not create the possibility of a malfunction of a different type than any previously evaluated in the SAR. This activity is safe and does not represent an Unreviewed Safety Question.

<u>Change Number</u>	<u>Title</u>	<u>SE Number</u>
TRMCR 99-2-4	Revision to Section 3.0 of the Millstone Unit 2 Technical Requirements Manual	S2-EV-98-0174

Description of Change

This activity revises the Unit No. 2 Technical Requirements Manual (TRM) Section 3.0 to reflect changes made to the “Millstone 2 10CFR50 Appendix R Compliance Report.”

Reason for the Change

This activity ensures that plant equipment, required to conduct a post-fire safe shutdown, is available and operable during Modes 1 through 4.

Safety Evaluation Summary

This change to the Unit No. 2 TRM is administrative in nature and does not involve any hardware changes.

This TRM revision does not increase the probability of occurrence of a malfunction of equipment important to safety previously evaluated in the Safety Analysis Report (SAR), does not increase the consequence of a malfunction of equipment important to safety previously evaluated in the SAR, and does not create the possibility of a malfunction of a different type than any previously evaluated in the SAR. This activity is safe and does not represent an Unreviewed Safety Question.

<u>Change Number</u>	<u>Title</u>	<u>SE Number</u>
TRMCR 99-2-8	Technical Requirements Manual	S2-EV-99-0069

Description of Change

This change to the Technical Requirements Manual Section F.3.1.a.1 revises continuous fire watch requirements for penetration fire barriers. This revision changes the requirement so that fire detection or automatic suppression systems will only be required to monitor one side instead of both sides of the barrier.

Reason for Change

This change represents a substantial savings in fire watch expenses and results in a more effective use of manpower, while providing a comparable level of coverage.

Safety Evaluation Summary

The probability of a fire watch not performing a required inspection is not increased by the proposed revision to fire watch requirements. Sufficient administrative controls are in place to assure that roving fire watch inspections are performed at the required frequency. These administrative controls have been deemed acceptable. This revision will not change those administrative controls.

The probability that the fire barrier will fail is not increased by this revision. This change provides a comparable level of protection.

The consequences of a penetration fire barrier failure include the possibility for a single fire to result in failure of redundant trains of equipment important to safety and a possible impact upon the ability to safely shutdown the reactor. However, the effectiveness of any penetration fire barrier will not be reduced by the proposed revisions. The requirement to maintain the penetration fire barrier operational is unchanged by this revision. The only change will be in the compensatory measures provided when a penetration fire barrier is declared inoperable.

This change will not increase the consequences of a fire spreading from one side of the barrier to the other. This change is safe and does not represent an Unreviewed Safety Question.

<u>Change Number</u>	<u>Title</u>	<u>SE Number</u>
TRMCR 99-2-10	RCP Speed Time Response	S2-EV-99-0075

Description of Change

The reactor trip function unit: Underspeed - Reactor Coolant Pumps (RCPs) response time acceptance criteria of ≤ 0.45 seconds was changed (increased) to ≤ 0.65 seconds.

Reason for the Change

The response time acceptance criteria was changed to allow margin to accommodate the adaptation of the Instrument Society of America (ISA S67.06-1984) testing guidance which applies a 1 time constant step change vice the formerly used loss of signal test.

Safety Evaluation Summary

Increasing the response time acceptance criteria to ≤ 0.65 seconds for the "Underspeed - Reactor Coolant Pumps" trip is safe because it does not adversely impact Reactor Protective System (RPS) performance and maintains operation consistent with the assumptions in the accident analysis and Technical Specifications. Response time testing is still being performed as required by the Technical Specifications. With the slight increase in response time acceptance criteria, the RCP underspeed reactor trip will still actuate before the RCS low flow reactor trip (which is the trip explicitly credited in the accident analysis for Departure from Nucleate Boiling (DNB) protection). Therefore, the RCP underspeed trip continues to provide additional margin to DNB. The increased response time acceptance criteria does not affect operation of the RCPs and the reliability is not adversely impacted. There is no adverse impact on the margin of safety due to the fact that the probability of failure/malfunction of the equipment is not increased by the response time acceptance criteria change, and the minimum DNB criteria is still maintained. Therefore, this activity is safe and does not represent an Unreviewed Safety Question.

<u>Change Number</u>	<u>Title</u>	<u>SE Number</u>
TRMCR 99-2-11	Removal of 2-FW-5A & 2-FW-5B From TRM Table 3.3-5H	S2-EV-99-0077

Description of Change

Removal of 2FW-5A & 2-FW-5B from Table 3.3-5H of the Technical Requirements Manual for stroke timing.

Reason for the Change

Stroke timing of air assist cylinder does not measure the response time of the check valve, nor is it required.

Safety Evaluation Summary

The amount of time required for the air assist cylinder to stroke does not impact the operation of the check valves; they will still close during reverse flow conditions in less than 14 seconds. The check valves are credited for preventing reverse flow until the feedwater isolation valves close. Feedwater isolation is tested to be less than 14 seconds, while the Final Safety Analysis Report assumes 30 seconds.

Deletion of stroke timing for the air assist cylinders does not impact the operation of the check valves; they will still close during reverse flow conditions in less than 14 seconds.

The check valve disk is free to operate regardless of air cylinder positions or stroke time. The conditions under which the valve is operated will not change and there are no new components. Thus, a new malfunction scenario is not created.

This change is safe and not an Unreviewed Safety Question.

<u>Change Number</u>	<u>Title</u>	<u>SE Number</u>
TRMCR 99-2-22 FSARCR 99-MP2-97	Revision of Containment Penetrations 6, 7, 8, 9 Valve List from TRM Table 5-1, FSAR Table 5.2-11, FSAR Table 5.2-13 and FSAR Figures 5.2-28 and 29	S2-EV-99-0141

Description of Change

The subject Technical Requirements Manual Change Request (TRMCR) and Final Safety Analysis Report Change Request (FSARCR) revises the applicable containment penetration tables (i.e., TRM Table 5-1 "Containment Isolation Valves List", Final Safety Analysis Report (FSAR) Table 5.2-11, "Containment Structure Isolation Valve Information", FSAR Table 5.2-13, "Major Containment Isolation Valves" and FSAR Figures 5.2-28 and 29, "Isolation Valve Arrangements") to delete 24 valves inside containment at penetrations 6, 7, 8, and 9, which are not credited to perform a containment isolation function in accordance with the design basis.

Reason for the Change

Review of these containment penetrations determined that the 24 valves identified do not perform a containment isolation safety function in accordance with the applicable licensing design basis.

Safety Evaluation Summary

The subject changes would remove valves which were inadvertently maintained as containment isolation valves after the installation of check valves in 1973. Since the change does not conflict with the intent of the original design basis for containment isolation, these changes will not result in the plant being operated in an unsafe condition, decrease the available safety margins, nor adversely impact the consequences of an accident. This change will cause no increase in the risk to the public health or safety. The change is in accordance with the original provisions for assuring containment isolation and integrity. Therefore, it does not increase the probability of event occurrence, probability of human errors mitigating the event, the probability of the failure of mitigating equipment, nor the introduction of any new accidents or equipment malfunctions. This change is safe and does not represent an Unreviewed Safety Question.

<u>Change Number</u>	<u>Title</u>	<u>SE Number</u>
Procedure EOP 2540 Rev 18 OPS Form 2540-1 Rev 13	Functional Recovery	E2-EV-99-0003
Procedure EOP 2540A Rev 9	Functional Recovery of Reactivity Control	
Procedure EOP 2540B Rev 10	Functional Recovery of Vital Auxiliaries	
Procedure EOP 2540C Rev 13	Functional Recovery of RCS Inventory and Pressure	
Procedure EOP 2540D Rev 14	Functional Recovery of Heat Removal	
Procedure EOP 2540E Rev 11	Functional Recovery of Containment Integrity	

Description of Change

Changes were made to Emergency Operating Procedure (EOP) 2540 OPS Form 2540-1 in the entry conditions description for functional recovery and in the usage of the Safety Function Status check. The criteria for tripping the Reactor Coolant Pumps (RCPs) was revised and steps were added to put Hydrogen monitors into service. Additional detail was added concerning the monitoring of Control Room habitability. Changes to EOP 2540A revise the steps for emergency boration using charging or High Pressure Safety Injection (HPSI). Changes to EOP 2540B add detail to the steps associated with closing fuel oil valves on the Emergency Diesel Generators (EDGs), ensure consistency with Station Black Out (SBO) documentation, ensure Service Water pumps will be started against sufficient hydraulic resistance, ensure proper operation of Main Steam Isolation Valves (MSIVs) and bypass valves, and provide additional guidance on restoration of electrical busses and instrument air. Changes to EOP 2540C revise the control bands and acceptance criteria on pressurizer level used in the procedure, change the guidance for monitoring and eliminating voids to be consistent with EOPs and CEN-152 guidance, incorporate new Technical Specifications values for Engineered Safeguard Actuation System (ESAS) actuation, add contingency actions for manually isolating open Pressure Operating Relief Valves (PORVs), and change the Reactor Water Storage Tank (RWST) levels used in initiating Safety Relief Actuation System (SRAS) and miniflow isolation. Changes to EOP 2540D clarify the use of Once Through Cooling, address the opening of Main Steam Isolation Valves (MSIVs) and bypass valves, implement the use of a new procedure (EOP 2541), add steps to verify ventilation in the vital switchgear rooms after a High Energy Line Break (HELB), revise guidance for verifying heat removal via main steam safeties, revise steps for emergency boration and for using fire water pumps to supply Auxiliary Feed Water (AFW), incorporate new Technical Specifications values for ESAS actuation, modify guidance for mitigating a Steam Generator Tube Rupture to reflect the safety analysis and CEN-152 guidance, revise guidance

<u>Change Number</u>	<u>Title</u>	<u>SE Number</u>
Procedure EOP 2540 Rev 18 OPS Form 2540-1 Rev 13	Functional Recovery	E2-EV-99-0003
Procedure EOP 2540A Rev 9	Functional Recovery of Reactivity Control	
Procedure EOP 2540B Rev 10	Functional Recovery of Vital Auxiliaries	
Procedure EOP 2540C Rev 13	Functional Recovery of RCS Inventory and Pressure	
Procedure EOP 2540D Rev 14	Functional Recovery of Heat Removal	
Procedure EOP 2540E Rev 11	Functional Recovery of Containment Integrity	

Description of Change (Continued)

for disabling RCPs and for Excess Steam Demand Events for controlling Reactor Coolant System (RCS) heat removal, revise Condensate Storage Tank action point levels and RCP restart guidance, revise pressurizer level control bands and steps for monitoring and eliminating voids in the RCS, and revise steps for restoring condenser air removal to the Unit 1 stack and securing from once through cooling. Changes to EOP 2540D incorporate new Technical Specifications values for ESAS actuation and provide new success criteria for containment temperature and pressure control paths.

Reason for the Change

These EOPs were upgraded to incorporate the effects of instrument uncertainties as recommended in CE NPSD-1009, "I&C Engineering Limits and Bases in EOPs Including Evaluation of Instrument Uncertainties," March, 1996, to address issues raised during the Configuration Management Program review, to incorporate the results of the branching review, to incorporate changes/modifications to the plant, and to make format changes for consistency throughout the EOP set.

Safety Evaluation Summary

The changes to EOP 2540 have been evaluated against the existing plant procedures, the plant Technical Specifications, the generic emergency procedure guidelines, and the system designs as described in the Final Safety Analysis Report. The changes are improvements consistent with the previous strategies and are therefore safe. The evaluation concluded that the changes do not constitute an Unreviewed Safety Question as defined in 10CFR50.59.

<u>Change Number</u>	<u>Title</u>	<u>SE Number</u>
AOP 2560 R8 FSARCR 99-MP2-79	Storms, High Winds and High Tides	S2-EV-99-0098

Description of Change

Revision 8 of AOP 2560 (AOP - Abnormal Operating Procedure) incorporated 10 previously approved changes; changes to the position of 2-FIRE-258 to full open versus 2 turns open, and disables the Diesel Oil Transfer Pumps P47A and P47B during the time period that the sea water level is above grade level during a probable maximum hurricane (PMH).

The following Final Safety Analysis Report (FSAR) changes were required to support the AOP change. FSAR Section 2.5.3.2.1.A was modified to disable the diesel oil transfer pumps to prevent transfer of water from underground storage tank to the supply tanks while the site is covered by a flood and the same section was modified to sample/remove/verify no water is in the underground tank prior to re-enabling the pumps after the flood waters recede.

Reason for the Change

This change was the result of Deficiency Report (DR) 0312 and was a corrective action for Condition Report (CR) M2-98-0263. The DR surmised that a PMH could create unusually high tides that are above site grade level were damage to the emergency diesel generator underground storage tanks could occur as well as tank flooding. The procedure change prevents the possibility for transfer of any potentially water laden fuel until oil purity confirmation is made.

Safety Evaluation Summary

The changes to AOP 2560 have been reviewed against the Technical Specifications, approved plant operating procedures, and the provisions and requirements of 10CFR50.59. This activity does not increase the probability of occurrence of a malfunction of equipment important to safety previously evaluated in the Safety Analysis Report (SAR), does not increase the consequence of a malfunction of equipment important to safety previously evaluated in the SAR, and does not create the possibility of a malfunction of a different type than any previously evaluated in the SAR. This activity is safe and does not represent an Unreviewed Safety Question.

<u>Change Number</u>	<u>Title</u>	<u>SE Number</u>
Procedure EOP 2541	EOP Technical Data Book	E2-EV-99-0004

Description of Change

All of the Emergency Operative Procedure (EOP) figures were relocated to new Procedure EOP 2541. Figure 3.1 is being revised to add "or Mode 3 entry" to the Diagnostic starting point. Also, the containment pressure criteria is being revised from 2.0 psig to 1.0 psig based on a new Technical Specification value. Figures 3.2, 3.3, 3.4 and 3.5 have been revised in accordance with revised calculated flows and/or to incorporate instrument uncertainties. All of the EOP schematics are being relocated to EOP 2541. The table regarding the load limitations when power from Unit 1 is being supplied via Bus 14H has been reworded to eliminate the load limitation when emergency power is being provided by the Unit 1 gas turbine (Unit 1 is permanently shutdown). Guidance was added to restrict restarting the Reactor Cooling Pumps if the cold leg temperature is less than 275° F. The applicable guidance from Operations Procedures 2301C, 2207, 2310, and OPS Form 2208-13 have been incorporated to eliminate branching. Additional guidance on the operation of Control Element Drive Mechanism fans to aid in reactor vessel cooling and steps to address injection line flushing when initiating shutdown cooling have been added.

Reason for the Change

This new procedure is being created as a single repository for technical data per OP 2260, "Unit 2 EOP User's Guide." It is intended to facilitate procedure maintenance since each EOP uses many of the same figures and standard steps such as plant cooldown.

Safety Evaluation Summary

The changes to create a new EOP 2541 have been evaluated against the existing plant procedures, the plant Technical Specifications, and the accident analysis assumptions as described in the Final Safety Analysis Report. The changes are improvements consistent with the previous EOP strategy and are therefore safe. This activity does not represent an Unreviewed Safety Question and is safe.

<u>Change Number</u>	<u>Title</u>	<u>SE Number</u>
Procedure CP 2804L, Rev. 3 FSARCR 99-MP2-64	Rx Coolant and Liquid Waste PASS	S2-EV-99-0086

Description of Change

This change adds steps to Chemistry Procedure CP 2804L to provide guidance on opening and closing 2-RB-210 to support Reactor Coolant Post Accident Sample System (RCPASS) cooling through Sample Coolers X-64 and 65 during an accident that results in a Safety Injection Actuation Signal (SIAS) and revises those portions of the Unit No. 2 Final Safety Analysis Report (FSAR) affected by this change.

Reason for the Change

Since it serves “non-essential” cooling loads, the Degasifier Effluent Cooler (X-51) outlet isolation valve 2-RB-210 receives a SIAS to close. The Sample Coolers return line is upstream of 2-RB-210, which results in isolation of the Reactor Building Closed Cooling Water (RBCCW) cooling flow post-accident, potentially rendering the RCPASS inoperable.

Safety Evaluation Summary

This change does not adversely affect any vital systems and no design basis accidents or malfunctions are adversely affected. All post-accident RBCCW flow requirements will be met or exceeded, ensuring all post-accident heat removal assumptions are unchanged.

This activity does not increase the probability of occurrence of a malfunction of equipment important to safety previously evaluated in the Safety Analysis Report (SAR), does not increase the consequence of a malfunction of equipment important to safety previously evaluated in the SAR, and does not create the possibility of a malfunction of a different type than any previously evaluated in the SAR. This activity is safe and does not represent an Unreviewed Safety Question.

<u>Change Number</u>	<u>Title</u>	<u>SE Number</u>
SPROC EN98-2-21	Main Generator Stability Test	S2-EV-99-0088

Description of Change

Special Procedure (SPROC) EN98-2-21 includes off line testing and adjustments of the Main Generator Excitation System Static Controls (ALTERREX) with the generator running at normal speed but not synchronized to the grid, and on line testing and adjustments of the ALTERREX with the generator synchronized to the grid. The main generator voltage regulation stability verification test was performed off line, and testing of the Underexcited Reactive Ampere Limit (U.R.A.L.) was performed on line.

Reason for the Change

The test is necessary to make control adjustments and to ensure the ALTERREX performs as described in the General Electric (GE) instruction manual.

Safety Evaluation Summary

The testing does not impact any safety related systems, structures, or components. During this test, the plant was operated in accordance with normal operating procedures consistent with equipment performance characteristics and limits. The main generator was not operated beyond its design capabilities. All tests are normal exciter/generator startup tests described in the GE ALTERREX exciter instruction manual. This activity does not represent an Unreviewed Safety Question and is safe.

<u>Change Number</u>	<u>Title</u>	<u>SE Number</u>
SPEC SP-M2-EE-012 FSARCR 99-MP2-40	Design Specification for Regulatory Guide 1.97 Instrumentation Millstone Unit 2 - Standard Specification	S2-EV-99-0007

Description of Change

This change revises Specification SP-M2-EE-012 and the Unit No. 2 Final Safety Analysis Report (FSAR) Table 7.5-3 to remove variables A-02 and A-06, to add general notes to clarify Unit No. 2 compliance with Regulatory Guide 1.97 and commitments made regarding Regulatory Guide 1.97, to incorporate approved Design Change Notice changes and to incorporate editorial changes.

Reason for the Change

This change removes Pressurizer Pressure (wide range) and Containment Pressure (wide range) instrumentation from Type A classification, incorporates approved DCN changes editorial changes, and clarifies Unit No. 2 compliance with Regulatory Guide 1.97 and commitments made regarding Regulatory Guide 1.97.

Safety Evaluation Summary

These changes do not affect the ability of any Regulatory Guide 1.97 loops to perform their required function to satisfy the design, licensing and performance objectives consistent with existing design capabilities. This activity does not increase the probability of occurrence of a malfunction of equipment important to safety previously evaluated in the Safety Analysis Report (SAR), does not increase the consequence of a malfunction of equipment important to safety previously evaluated in the SAR, and does not create the possibility of a malfunction of a different type than any previously evaluated in the SAR. This activity is safe and does not represent an Unreviewed Safety Question.

<u>Change Number</u>	<u>Title</u>	<u>SE Number</u>
SPEC SP-M2-EE-332 Rev. 1 SPEC SP-M2-EE-352 Rev. 4 FSARCR 99-MP2-47	MP2 Environmental Conditions for Equipment Qualification, and Specification for MP2 Environmental Qualification Master List and Equipment Qualification Records	S2-EV-99-0064

Description of Change

Revisions to Specifications that govern the Unit No. 2 Environmental Qualification Program.

Reason for Change

This change incorporates reanalysis of certain environmental conditions, to reflect new environmental conditions in the qualification of affected equipment, and to add equipment to the Environmental Qualification Master List where it has been determined to be appropriate, and to support a change to the Final Safety Analysis Report.

Safety Evaluation Summary

The revision of specifications which determine environmental conditions and determine and document the ability of certain plant equipment to function under those environmental conditions in accordance with Federal Regulations and other appropriate codes, standards, and industry practice is both safe and appropriate. Determining the appropriate environmental conditions and ensuring that equipment required to function under those conditions is qualified to function under those conditions ensures that such equipment is available to mitigate the consequences of malfunctions and accidents as designed. No aspect of the Electrical Environmental Qualification program or its specifications is capable of creating a new malfunction or accident or altering the probabilities of existing accidents or malfunctions. This activity does not represent an Unreviewed Safety Question and is safe.

<u>Change Number</u>	<u>Title</u>	<u>SE Number</u>
SP-EE-362 FSARCR 98-MP2-62 FSARCR 99-MP2-53	Station Blackout (SBO), Safe Shutdown Scenario Document	S2-EV-99-0050

Description of Change

This activity revises the Station Blackout (SBO), Safe Shutdown Scenario Document Specification, SP-EE-362. This revision contains numerous corrections and clarifications and reflects new calculations, evaluations, and analyses performed to enhance the Unit's SBO program. Additionally, the revision reflects the impact of Unit No. 1's permanently defueled status on the Unit No. 2 SBO program (crediting the Unit No. 1 Emergency Diesel Generator as the sole source of alternate AC power for the Unit No. 2 SBO event).

Reason for the Change

This activity reflects (in SP-EE-362) changes made to the SBO program and supporting analyses.

Safety Evaluation Summary

The Unit No. 1 diesel generator remains fully capable of adequately supplying the Alternate AC loads in a Unit No. 2 SBO event. It is safe to credit the Unit No. 1 Emergency Diesel Generator as the sole source of Alternate AC power for a Unit No. 2 SBO event. This activity does not increase the probability of occurrence of a malfunction of equipment important to safety previously evaluated in the Safety Analysis Report (SAR), does not increase the consequence of a malfunction of equipment important to safety previously evaluated in the SAR, and does not create the possibility of a malfunction of a different type than any previously evaluated in the SAR. This activity is safe and does not represent an Unreviewed Safety Question.

<u>Change Number</u>	<u>Title</u>	<u>SE Number</u>
Tagging Clearance No. 2-1785-99 (Temp Mod)	Remove Fuses for SI-628 HDR 1B Check Valve Leakage Drain Stop	S2-EV-99-0138

Description of Change

This change transferred configuration and operability status of safety injection valve SI-628 (used to isolate the branch line from the safety injection pumps discharge header to #2 Safety Injection Tank) to the Operations Department. Fuses for the control power and indication for this valve were removed in accordance with procedure WC-2 in order to cause the valve to remain in its closed (fail safe) position.

Reason for the Change

This change provides administrative control of valve SI-628 in order to monitor the valve's position while its position indication circuitry is in a degraded condition.

Safety Evaluation Summary

With the fuses that power SI-628 removed under the control of the Operations Tagging program, this valve and the Safety Injection System will perform their intended safety functions if called upon. The valve is in its fail safe position with its fuses pulled and still receives its Safety Injection Actuation Signal if the fuses are reinstalled.

This activity does not increase the probability of occurrence of a malfunction of equipment important to safety previously evaluated in the Safety Analysis Report (SAR), does not increase the consequence of a malfunction of equipment important to safety previously evaluated in the SAR, and does not create the possibility of a malfunction of a different type than any previously evaluated in the SAR. This activity is safe and does not represent an Unreviewed Safety Question.

<u>Change Number</u>	<u>Title</u>	<u>SE Number</u>
Temp Mod 2-99-008	Temporary Leak Repair, "A" EDG Supply	S2-EV-99-0079

Description of Change

This temporary modification utilizes a rubber patch to repair a Service Water system pipe leak on Spool 4253/4254 which is part of the supply piping to the "A" Emergency Diesel Generator (EDG).

Reason for the Change

This patch is necessary to control the leakage from a small hole (~1/4") in the "A" EDG service water supply piping prior to fabrication and installation of a permanent replacement spool.

Safety Evaluation Summary

Failure of the patch will result in water spray/leakage from the small hole in spool 4253/4254. A conservatively estimated loss of 50 gpm of service water out the leak will not prevent the service water system from fulfilling its design function of providing a sufficient supply of cool water. The spray shields and leakage collection barrels installed by the subject temporary modification will control and contain any leakage resulting from a patch failure. If the patch were to fall off, there is no danger of adversely impacting other safety related equipment in the area.

Increased surveillance of the area affected by the service water piping leak will alert Operations to a need for patch adjustment to minimize leakage.

The addition of the patch does not affect the structural integrity of the affected pipe spool.

The probability of a loss of the "A" EDG or any other plant equipment due to the addition of the temporary patch has not increased.

The installation of a patch does not affect the consequences of a service water leak. The compensatory measures (area leak containment and increased area surveillance) actually reduce the consequences of a leak in the area of the plant affected by the temporary modification. This change does not create the possibility of a malfunction of a different type than previously evaluated in the Safety Analysis Report (SAR). This activity does not represent an Unreviewed Safety Question and is safe.

<u>Change Number</u>	<u>Title</u>	<u>SE Number</u>
Temp Mod 2-99-009	Support of the Service Water Header to the "A" and "B" Header to the EDG	S2-EV-99-0083

Description of Change

This temporary modification removes two pieces of tube steel on service Water System (SWS) Support 327125/327157 and shims Support 527009.

Reason for the Change

Removal of the tube steel will allow removal of a SWS Spool 4253/4254 which is currently degraded and not Code compliant. Installation of the shim will keep the "A" Header operable while removing the tube steel from Support 3271125/327157. This will result in shortening the "A" Diesel outage while replacing spool 4253/4254.

Safety Evaluation Summary

Design calculations have been performed which demonstrate that the tube steel can be removed from Support 327125/327157 without affecting "B" header operability. In addition, a design evaluation supports installation of shims on support 527009 to maintain operability of the "A" header while the tube steel is removed from Support 327125/327157. Based on this evaluation, this change will not result in malfunctions or accidents evaluated or not evaluated in the Safety Analysis Report. This activity does not represent an Unreviewed Safety Question and is safe.

<u>Change Number</u>	<u>Title</u>	<u>SE Number</u>
Temp Mod 2-99-030	Temporary Contractor Water Treatment Facility	S2-EV-99-0144

Description of Change

The temporary modification relocates part of the current water treatment vendor (ECOLOCHEM) outside of Building 215 and installs a temporary water treatment facility (IONICS) partly inside and outside Building 215.

Reason for the Change

This temporary modification was put in place to maintain a continuous supply of make-up water for Unit No. 2/Unit No. 1 while the new vendor's permanent system is being implemented.

Safety Evaluation Summary

This change does not increase the probability or consequences of a malfunction of equipment important to safety since the water treatment system function is not changed by this temporary modification and the temporary modification does not introduce any new system interactions.

There are no accidents associated with the installation of this temporary modification. The water treatment system does not initiate, prevent or mitigate any of the accidents evaluated in the Safety Analysis Report, nor does it interact with safety related equipment in such a way as to introduce an unanalyzed accident.

This temporary modification is not an Unreviewed Safety Question and is safe.

<u>Change Number</u>	<u>Title</u>	<u>SE Number</u>
Temp Mod 2-99-031	Removal of Loop 1 Hot Leg RTD TE-112HD from RPS Channel D Input - Substitution with Loop 2 Hot Leg RTD TE-122HD	S2-EV-99-0145

Description of Change

This temporary modification removes temperature input TE-112HD from Reactor Protection System (RPS) Channel D and substituting it with the Loop #2 hot leg temperature signal from TE-122HD. This modification will be removed prior to completion of Unit No. 2 Refueling Outage 13 (RFO13).

Reason for the Change

RPS Channel D Loop #1 hot leg temperature input from TE-112HD was intermittently spiking causing various RPS channel trips to occur. This channel has been declared inoperable and has been placed in the trip condition. In addition, RPS Channel A was also experiencing noise problems. By substituting the temperature elements (112 with 122) the RPS circuitry will perform its intended safety function.

Safety Evaluation Summary

Replacing failing temperature element TE-112HD (Loop #1 hot leg temp) with TE-122HD (Loop # 2 hot leg temp) within Spec 200 Instrument Cabinet RC30D hot leg temperature averaging circuitry as part of Temporary Modification 2-99-031 does not represent an increased risk to the health and safety of the public since this change will be removed prior to the completion of RFO 13 and this change provides RPS Channel D a valid T-hot signal thereby allowing RPS Channel D to be restored to operable status. In this condition, the RPS Channel D T-hot signal will be generated from the Loop #2 hot leg temperature signal only and not an average of both as the Final Safety Analysis Report states.

Recent analysis by Siemens Power Corp in support of this temporary change has demonstrated the acceptability of the modification. This activity is safe and does not represent an Unreviewed Safety Question.

<u>Change Number</u>	<u>Title</u>	<u>SE Number</u>
FSARCR 97-MP2-12	FSAR Changes to Tables 6.5-1, 6.5-2, 6.6-1, 9.9-1, 9.9-2, 9.9-3, 9.9-4, 9.9-6, 9.9-7, 9.9-8, 9.9-9, 9.9-10, 9.9-11, 9.9-12, 9.9-13, 9.9-14, 9.9-15, 9.9-19, 9.9-20, 9.9-21	S2-EV-98-0265

Description of Change

This change to the Unit No. 2 Final Safety Analysis Report (FSAR) removes non-essential information from, and adds previously omitted critical parameters to, a number of tables containing information on the Unit No. 2 Heating, Ventilation and Air Conditioning equipment.

Reason for the Change

This change corrects discrepancies in the Unit No. 2 FSAR tables of Section 9.9 (which conflicted with parameters described in the related subsection of this section) and brings this information into conformance with that of other tables in Section 9.9.0.

Safety Evaluation Summary

Information considered to be non essential or non critical lower tier design inputs was removed from the FSAR, while information/data related to parameters required to meet safety functions for the system was added. This activity does not increase the probability of occurrence of a malfunction of equipment important to safety previously evaluated in the Safety Analysis Report (SAR), does not increase the consequence of a malfunction of equipment important to safety previously evaluated in the SAR, and does not create the possibility of a malfunction of a different type than any previously evaluated in the SAR. This activity is safe and does not represent an Unreviewed Safety Question.

<u>Change Number</u>	<u>Title</u>	<u>SE Number</u>
FSARCR 98-MP2-67	Change to MP2 FSAR Section 14.1, Increase in Heat Removal by the Secondary System	E2-EV-98-0025

Description of Change

Update of Unit No. 2 Final Safety Analysis Report (FSAR) Section 14.1 due to reanalysis of Event 14.1.3, Increase in Steam Flow.

Reason for the Change

This change was made to make the Unit No. 2 FSAR consistent with the revised accident analysis.

Safety Evaluation Summary

This activity does not increase the probability of occurrence of a malfunction of equipment important to safety previously evaluated in the Safety Analysis Report (SAR), does not increase the consequence of a malfunction of equipment important to safety previously evaluated in the SAR, and does not create the possibility of a malfunction of a different type than any previously evaluated in the SAR. This activity does not represent an Unreviewed Safety Question and is safe.

<u>Change Number</u>	<u>Title</u>	<u>SE Number</u>
FSARCR 98-MP2-90	FSAR Change to Reflect Removal of Containment Pedestal Crane	S2-EV-98-0141

Description of Change

This change updates Sections 5.2.6.8 and 9.8.1.2 of the Unit No. 2 Final Safety Analysis Report (FSAR) to reflect the fact that the containment pedestal crane is no longer installed.

Reason for the Change

This change brings the Unit No. 2 FSAR into conformance with current plant conditions.

Safety Evaluation Summary

This FSAR change is a document change only. This activity does not increase the probability of occurrence of a malfunction of equipment important to safety previously evaluated in the Safety Analysis Report (SAR), does not increase the consequence of a malfunction of equipment important to safety previously evaluated in the SAR, and does not create the possibility of a malfunction of a different type than any previously evaluated in the SAR. This activity is safe and does not represent an Unreviewed Safety Question.

<u>Change Number</u>	<u>Title</u>	<u>SE Number</u>
FSARCR 98-MP2-114	FSARCR for Various Changes to MP2 FSAR Sections 6.3 and 6.4	S2-EV-98-0114

Description of Change

This change removes an operational statement from a sub-section which addresses system topics; removes the indication that providing Containment Spray System (CSS) flow to the suctions of the High Pressure Safety Injection (HPSI) pumps is the preferred method of core cooling during the post-Loss of Coolant Accident (LOCA) recirculation mode; corrects a statement regarding the basis for the configuration that permits CSS flow to the suctions of the HPSI pumps; includes mention of the opening of the Safety Injection Tank outlet isolation valves upon receipt of increasing Reactor Coolant System Pressurizer pressure during plant heatup; corrects text which could be read to indicate that the SIT outlet isolation valves may be closed on receipt of a Safety Injection Actuation Signal; removes statements regarding provision for CSS flow to the suctions of the HPSI pumps in a paragraph regarding core cooling during the post-LOCA recirculation mode; provides a more complete description of the Low Pressure Safety Injection pump alignment used for post-LOCA recirculation and boron precipitation control; and remove text not supported by Unit No. 2 procedures.

Reason for the Change

This change corrects inaccuracies and makes clarifications to the Unit No. 2 FSAR .

Safety Evaluation Summary

This FSAR change is a document change only and does not affect Unit No. 2 systems' design, configuration, or operation. This activity does not increase the probability of occurrence of a malfunction of equipment important to safety previously evaluated in the Safety Analysis Report (SAR), does not increase the consequence of a malfunction of equipment important to safety previously evaluated in the SAR, and does not create the possibility of a malfunction of a different type than any previously evaluated in the SAR. This activity is safe and does not represent an Unreviewed Safety Question.

<u>Change Number</u>	<u>Title</u>	<u>SE Number</u>
FSARCR 98-MP2-123	EBFS Charcoal Filters Temperature Sensors	S2-EV-98-0165

Description of Change

This change revises Section 6.7 (Enclosure Building Filtration System (EBFS)) of the Unit No. 2 Final Safety Analysis Report (FSAR) to correct inaccuracies and change the system description based on the results of a revised calculation ("Enclosure Building Charcoal Filter Post-Accident Heat-Up and Iodine Loading Evaluation" - 97-EBF-01955-M2, Rev. 1).

Reason for the Change

This change corrects FSAR inaccuracies in the description of the operation of the EBFS filter units .

Safety Evaluation Summary

This FSAR change is a document change only, made to correct inaccuracies in the description of the operation of the EBFS filter units. This activity does not increase the probability of occurrence of a malfunction of equipment important to safety previously evaluated in the Safety Analysis Report (SAR), does not increase the consequence of a malfunction of equipment important to safety previously evaluated in the SAR, and does not create the possibility of a malfunction of a different type than any previously evaluated in the SAR. This activity is safe and does not represent an Unreviewed Safety Question.

<u>Change Number</u>	<u>Title</u>	<u>SE Number</u>
FSARCR 98-MP2-167	FSARCR for Section 11.1, Radioactive Waste Processing Systems	S2-EV-97-0047

Description of Change

This change revises the Unit No. 2 Final Safety Analysis Report (FSAR) to reflect the actual equipment availability, process parameters and radiological effectiveness, and to update the resultant expected radiological dose consequences and normal design effluent radionuclide concentrations, of the liquid and gaseous waste processing systems.

Reason for the Change

This change resolves inconsistencies between the Unit No. 2 FSAR and actual radwaste processing parameters, equipment availability, radiological effectiveness, expected radiological dose consequences, and normal design effluent radionuclide concentrations.

Safety Evaluation Summary

This change is a document change and has no effect on the reliability, operation or configuration of any plant systems. This activity does not increase the probability of occurrence of a malfunction of equipment important to safety previously evaluated in the Safety Analysis Report (SAR), does not increase the consequence of a malfunction of equipment important to safety previously evaluated in the SAR, and does not create the possibility of a malfunction of a different type than any previously evaluated in the SAR. This activity does not represent an Unreviewed Safety Question and is safe.

<u>Change Number</u>	<u>Title</u>	<u>SE Number</u>
FSARCR 98-MP2-167	FSARCR for Section 11.1, Radioactive Waste Processing Systems	S2-EV-99-0008

Description of Change

This change revises the Unit No. 2 Final Safety Analysis Report (FSAR) to reflect the actual equipment availability, process parameters and radiological effectiveness, and to update the resultant expected radiological dose consequences and normal design effluent radionuclide concentrations, of the liquid and gaseous waste processing systems.

Reason for the Change

This change resolves inconsistencies between the Unit No. 2 FSAR and actual radwaste processing parameters, equipment availability, radiological effectiveness, expected radiological dose consequences, and normal design effluent radionuclide concentrations.

Safety Evaluation Summary

This FSAR change is a document change that revises the FSAR to reflect the actual equipment availability, process parameters and radiological effectiveness of the liquid and gaseous waste processing systems, and has no effect on the reliability, operation or configuration of any plant systems. This activity does not increase the probability of occurrence of a malfunction of equipment important to safety previously evaluated in the Safety Analysis Report (SAR), does not increase the consequence of a malfunction of equipment important to safety previously evaluated in the SAR, and does not create the possibility of a malfunction of a different type than any previously evaluated in the SAR. This activity does not represent an Unreviewed Safety Question and is safe.

<u>Change Number</u>	<u>Title</u>	<u>SE Number</u>
FSARCR 98-MP2-173	Change to Steam Generator Level-AFW Auto Initiation Functional Description: FSAR 7.3.2.2.h	S2-EV-98-0254

Description of Change

This change revises the functional description, found in the Unit No. 2 Final Safety Analysis Report (FSAR), of the automatic initiation of Auxiliary Feedwater from low steam generator level signal inputs.

Reason for the Change

This change provides a more representative description of system operation and eliminates confusion on the operation of the Auxiliary Feedwater Automatic Initiation System (AFAIS) and the associated steam generator level signal inputs.

Safety Evaluation Summary

This FSAR change is a document change only which provides a more representative description of system operation and eliminates confusion on the operation of the AFAIS and the associated steam generator level signal inputs and has no effect on the reliability, operation or configuration of any plant systems. This activity does not increase the probability of occurrence of a malfunction of equipment important to safety previously evaluated in the Safety Analysis Report (SAR), does not increase the consequence of a malfunction of equipment important to safety previously evaluated in the SAR, and does not create the possibility of a malfunction of a different type than any previously evaluated in the SAR. This activity is safe and does not represent an Unreviewed Safety Question.

<u>Change Number</u>	<u>Title</u>	<u>SE Number</u>
FSARCR 98-MP2-174	Millstone Site Radio Communication	S2-EV-98-0274

Description of Change

This change to the Unit No. 2 Final Safety Analysis Report (FSAR) modifies the description of the radio system contained in Section 7.8 of the FSAR to be consistent with the 800 MHz radio system currently installed.

Reason for the Change

This modification updates the Unit No. 2 FSAR to reflect the changes associated with the 800 MHz radio system.

Safety Evaluation Summary

This change is a document change and has no effect on the reliability, operation or configuration of any plant systems. The change does not increase the probability of a malfunction or the occurrence of an accident. It will not increase the consequences of a malfunction or an accident, or create the possibility of a different type of malfunction or accident. The activity does not modify any plant control system or alter the performance of an safety system required to mitigate accidents or anticipated operational occurrences. The change does not impact any assumptions contained in the accident analyses or reduce the margin of safety as defined in the basis for any technical specification. This activity is safe and does not represent an Unreviewed Safety Question.

<u>Change Number</u>	<u>Title</u>	<u>SE Number</u>
FSARCR 98-MP2-188	FSARCR for CVCS SEAM Review (Procedures)	S2-EV-98-0297

Description of Change

This change updates the Unit No. 2 Final Safety Analysis Report (FSAR) to note that boric acid may be gravity fed to the charging pump suction in order to bring the unit to cold shutdown external to the control room, to note that Table 7.6-2 lists equipment normally used for cold shutdown rather than required for cold shutdown, and to bring the FSAR into conformance with approved and appropriate procedures on Chemical and Volume Control System operation.

Reason for the Change

This change brings the FSAR into conformance with analyzed, as built, conditions and approved, appropriate procedures.

Safety Evaluation Summary

This FSAR change is a document change only. This activity does not increase the probability of occurrence of a malfunction of equipment important to safety previously evaluated in the Safety Analysis Report (SAR), does not increase the consequence of a malfunction of equipment important to safety previously evaluated in the SAR, and does not create the possibility of a malfunction of a different type than any previously evaluated in the SAR. This activity is safe and does not represent an Unreviewed Safety Question.

<u>Change Number</u>	<u>Title</u>	<u>SE Number</u>
FSARCR 98-MP2-194	Additional Alarm Description in FSAR Section 8.3.4.1 Emergency Generator Special Feature	S2-EV-98-0298

Description of Change

This change updates the Unit No. 2 Final Safety Analysis Report (FSAR) to add the alarm condition described as “Diesel Generator Breaker Trouble”.

Reason for the Change

This change updates FSAR Section 8.3.4.1 to incorporate the existence of an alarm condition not previously listed in this FSAR section.

Safety Evaluation Summary

This FSAR change is a document change only that incorporates the existence of an alarm condition not previously listed. This activity does not increase the probability of occurrence of a malfunction of equipment important to safety previously evaluated in the Safety Analysis Report (SAR), does not increase the consequence of a malfunction of equipment important to safety previously evaluated in the SAR, and does not create the possibility of a malfunction of a different type than any previously evaluated in the SAR. This activity is safe and does not represent an Unreviewed Safety Question.

<u>Change Number</u>	<u>Title</u>	<u>SE Number</u>
FSARCR 98-MP2-196	FSARCR for RPS, ESFAS, and RAD Monitoring from FSAR SEAM Review	S2-EV-98-0304

Description of Change

This change updates the Unit No. 2 Final Safety Analysis Report (FSAR) to correct descriptions of systems and tests performed on the Emergency Safety Features Actuation System (ESFAS), Reactor Protection System (RPS), and Radiation Monitoring Systems.

Reason for the Change

This change makes the FSAR consistent with Technical Specifications, system design, and appropriate and approved testing procedures.

Safety Evaluation Summary

This FSAR change is a document change only which corrects descriptions of systems and tests performed on the ESFAS, RPS, and Radiation Monitoring Systems. This activity does not increase the probability of occurrence of a malfunction of equipment important to safety previously evaluated in the Safety Analysis Report (SAR), does not increase the consequence of a malfunction of equipment important to safety previously evaluated in the SAR, and does not create the possibility of a malfunction of a different type than any previously evaluated in the SAR. This activity is safe and does not represent an Unreviewed Safety Question.

<u>Change Number</u>	<u>Title</u>	<u>SE Number</u>
FSARCR 98-MP2-200	FSAR Update to Incorporate Small Break LOCA and Large Break LOCA Reanalyses	E2-EV-98-0033

Description of Change

This change updates the Unit No. 2 Final Safety Analysis Report (FSAR) to incorporate the most recent Small Break Loss of Coolant Accident (LOCA) and Large Break LOCA analyses.

Reason for the Change

This change corrects the FSAR to reflect the most recent Small Break LOCA (SBLOCA) and Large Break LOCA (LBLOCA) analyses. The LBLOCA was reanalyzed to incorporate revised plant specific input such as High Pressure Safety Injection (HPSI) and Low Pressure Safety Injection (LPSI) flow delivery curves and maximum containment spray flow rate, modeling of the replacement steam generators, and to utilize Siemens Power Corporation's revised LBLOCA methodology. SBLOCA reanalysis addressed HPSI flow issues such as possible asymmetric flow delivered to the four cold legs, pump degradation, and flow measurement uncertainty.

Safety Evaluation Summary

All input changes to the SBLOCA and LBLOCA reanalyses were reviewed and the design basis was changed to incorporate these reanalyses. The reanalyses do not increase the probability of occurrence of a malfunction of equipment important to safety previously evaluated in the Safety Analysis Report (SAR), do not increase the consequence of a malfunction of equipment important to safety previously evaluated in the SAR, and do not create the possibility of a malfunction of a different type than any previously evaluated in the SAR. This activity is safe and does not represent an Unreviewed Safety Question.

<u>Change Number</u>	<u>Title</u>	<u>SE Number</u>
FSARCR 99-MP2-1	Changes to FSAR Section 6.5 and Table 7.5-1 from CAR and Cooling System FSAR/Calculation/Procedure Seam Review	S2-EV-98-0313

Description of Change

This change to the Unit No. 2 Final Safety Analysis Report (FSAR) rewords a misleading reference to a technical specification reference, clarifies the containment temperature alarm and operator response, clarifies the pitch of the fins on the car cooler coils, and changes the tense for tests and inspections to clarify inspections that were done prior to startup or on prototypical equipment vs. ongoing periodic testing.

Reason for the Change

This change corrects the FSAR to reflect actual design and operating bases with regard to certain aspects of the Containment Air Recirculation and Cooling System and containment temperature monitoring.

Safety Evaluation Summary

This FSAR change is a document change which corrects the FSAR to reflect actual design and operating bases. This activity does not increase the probability of occurrence of a malfunction of equipment important to safety previously evaluated in the Safety Analysis Report (SAR), does not increase the consequence of a malfunction of equipment important to safety previously evaluated in the SAR, and does not create the possibility of a malfunction of a different type than any previously evaluated in the SAR. This activity is safe and does not represent an Unreviewed Safety Question.

<u>Change Number</u>	<u>Title</u>	<u>SE Number</u>
FSARCR 99-MP2-2	Revisions to ESF Descriptions	S2-EV-98-0305

Description of Change

This change revises the Unit No. 2 Final Safety Analysis Report (FSAR) to remove the description of the normal position of Enclosure Building Filtration System (EBFS) dampers.

Reason for the Change

This change corrects the implication that all motor operated dampers in the EBFS are both normally open and aligned for system operation.

Safety Evaluation Summary

This FSAR change clarifies the normal position of EBFS dampers and is a document change only. This activity does not increase the probability of occurrence of a malfunction of equipment important to safety previously evaluated in the SAR, does not increase the consequence of a malfunction of equipment important to safety previously evaluated in the SAR, and does not create the possibility of a malfunction of a different type than any previously evaluated in the SAR. This activity does not represent an Unreviewed Safety Question and is safe.

<u>Change Number</u>	<u>Title</u>	<u>SE Number</u>
FSARCR 99-MP2-3	Change to MP2 FSAR Section 14.0, (Safety Analysis) General	E2-EV-98-0035

Description of Change

This change clarifies information provided in the safety analysis contained in Chapter 14 of the Unit No. 2 Final Safety Analysis Report (FSAR), corrects obsolete information, and incorporates comments from Unit No. 2's 10CFR50.54(f) review.

Reason for the Change

This change corrects and clarifies information associated with the FSAR Chapter 14 safety analysis.

Safety Evaluation Summary

This change to the FSAR contains many changes that are non-intent (i.e., typographical), clarification, or administrative in nature. The remaining changes have no impact on Unit No. 2's licensing basis accident analysis as defined in Chapter 14 of the FSAR. This FSAR change does not increase the probability of occurrence of a malfunction of equipment important to safety previously evaluated in the Safety Analysis Report (SAR), does not increase the consequence of a malfunction of equipment important to safety previously evaluated in the SAR, and does not create the possibility of a malfunction of a different type than any previously evaluated in the SAR. This activity is safe and does not represent an Unreviewed Safety Question.

<u>Change Number</u>	<u>Title</u>	<u>SE Number</u>
FSARCR 99-MP2-5	NI Annunciator Circuits Modification	S2-EV-97-0003

Description of Change

This change updates the Unit No. 2 Final Safety Analysis Report (FSAR) to reflect a reduction of the voltage of nine annunciator circuits in the Nuclear Instrumentation drawers from 125VDC to 28VDC (previously made in accordance with Design Change Record M2-96056).

Reason for the Change

This change eliminates a discrepancy between the Unit No. 2 FSAR and actual plant conditions.

Safety Evaluation Summary

This FSAR change was made as a document change only. This activity does not increase the probability of occurrence of a malfunction of equipment important to safety previously evaluated in the Safety Analysis Report (SAR), does not increase the consequence of a malfunction of equipment important to safety previously evaluated in the SAR, and does not create the possibility of a malfunction of a different type than any previously evaluated in the SAR. This activity is safe and does not represent an Unreviewed Safety Question.

<u>Change Number</u>	<u>Title</u>	<u>SE Number</u>
FSARCR 99-MP2-6 FSARCR 99-MP2-71	Change Pipe Rupture Dynamic Effects Design Basis-From Double-Ended-Guillotine-Break to Leak- Before-Break (LBB) for the Main Coolant Loop (MCL), Safety Injection (SI), and Shutdown Cooling (SDC) Piping	S2-EV-98-0312

Description of Change

The design basis for the consideration of the dynamic (mechanical) effects associated with the postulated pipe ruptures in the Reactor Coolant System main coolant loop (MCL) piping, Safety Injection (SI), and Shutdown Cooling (SDC) Piping has been changed from Double-Ended-Guillotine-Break to the one based on the Leak-Before-Break (LBB) technology. This change to the Unit No. 2 Final Safety Analysis Report (FSAR) revises those portions of the FSAR (Sections 1.A.1, 3A.5, 5.2.5.3, and 6.1.4.1.1) affected by the change in the pipe rupture dynamic effects design basis.

Reason for the Change

The revised dynamic effects design basis for systems and components utilizing LBB are being incorporated into the various FSAR sections noted above.

Safety Evaluation Summary

All of the changes to the FSAR noted above are consistent with the MCL, SE, and SDC system LBB evaluations which were reviewed and approved by the NRC. Evaluations have been completed that show the Millstone Unit No. 2 MCL and SI and SDC piping satisfy the NRC criteria for compliance with the current version of General Design Criteria-4. This activity does not increase the probability of occurrence of a malfunction of equipment important to safety previously evaluated in the Safety Analysis Report (SAR), does not increase the consequence of a malfunction of equipment important to safety previously evaluated in the SAR, and does not create the possibility of a malfunction of a different type than any previously evaluated in the SAR. This activity is safe and does not represent an Unreviewed Safety Question.

<u>Change Number</u>	<u>Title</u>	<u>SE Number</u>
FSARCR 99-MP2-12	Safety Evaluation for FSARCR for Containment Spray System Seam Review	S2-EV-99-0006

Description of Change

This change deletes the overly detailed description of testing the containment spray system and replaces it with a general statement regarding system testing that is more in line with the level of detail typically presented in the Final Safety Analysis Report (FSAR). Additionally, a clarification is added to the last paragraph of section 6.4.4.2 regarding access to the containment spray pumps and shutdown cooling heat exchangers.

Reason for the Change

The FSAR was revised to eliminate inconsistencies with plant procedures.

Safety Evaluation Summary

The change deletes the three paragraphs that provide a detailed description of system testing and replaces them with a general statement. The change does not impact the physical condition of the plant, and it is in conformance with the approved system operability testing, response time testing, and inservice testing surveillance procedures. Additionally, a clarification is made to indicate that the design and location of the containment spray pumps and shutdown cooling heat exchangers, and not the components themselves, allow access for testing and maintenance. This change does not alter the probabilities or consequences of any accidents or malfunctions; neither does it create any new malfunctions or accidents; nor does it reduce the margin of safety as defined in the basis for any Technical Specification. The change is safe and does not represent an Unreviewed Safety Question.

<u>Change Number</u>	<u>Title</u>	<u>SE Number</u>
FSARCR 99-MP2-17	Fuel and Reactor Component Handling System Seam Review	S2-EV-99-0013

Description of Change

This change corrects the weight of the spent fuel pool bulkhead gate and the length of the long tools attached to the hoist of the spent fuel pool platform crane as specified in Final Safety Analysis Report (FSAR) Section 9.8.2.1.2.

Reason for the Change

This change corrects inaccuracies found in the FSAR.

Safety Evaluation Summary

This change corrects existing FSAR text.

This change does not increase the probability of occurrence of a malfunction of equipment important to safety previously evaluated in the Safety Analysis Report (SAR), does not increase the consequence of a malfunction of equipment important to safety previously evaluated in the SAR, and does not create the possibility of a malfunction of a different type than any previously evaluated in the SAR. This activity is safe and does not represent an Unreviewed Safety Question.

<u>Change Number</u>	<u>Title</u>	<u>SE Number</u>
FSARCR 99-MP2-18	FSAR Change Request - Piping Modal Combination, Sections 5.8.4 and 5.8.5	S2-EV-99-0015

Description of Change

These changes to the Unit No. 2 (MP2) Final Safety Analysis Report (FSAR) more clearly define the seismic analysis design basis by specifically adding a description of the modal combination method used for piping analysis and components when the Response-Spectrum-Modal-Analysis technique is used, and make editorial non-intent changes.

Reason for the Change

The Atomic Energy Commission (AEC, currently the NRC) requested the licensee to provide the methodology used to combine closely spaced modes for structures and piping system. The response provided was that all modes are combined absolutely. This response, while correct for the building structures, was not consistent with what was used for piping analysis at the time. The response was interpreted by NRC as indicating that closely-spaced modes for piping systems were combined absolutely.

The use of the Square Root Sum of the Squares (SRSS) method for modal combination, which was considered standard industry practice at the time of MP2's original licensing effort, is MP2's proper licensing basis. This change more clearly describes this method as MP2's design and licensing basis.

Safety Evaluation Summary

The use of the SRSS method was reviewed and accepted by the NRC during inspections conducted in relation to I&E Bulletin 79-14, is consistent with plants of Unit No. 2 vintage, and is considered to be appropriate for analysis based on Appendix N of the ASME Boiler and Pressure Vessel Code, Section III. The use of the SRSS method will not result in piping pressure boundary failures, will not result in an increase in the probability or consequences of a malfunction of equipment important to safety previously analyzed in the SAR, and will not create new malfunctions or malfunctions of a type different than any previously evaluated in the SAR. This activity is safe and does not represent an Unreviewed Safety Question.

<u>Change Number</u>	<u>Title</u>	<u>SE Number</u>
FSARCR 99-MP2-23	Access Control Area Air Conditioning System	S2-EV-98-0310

Description of Change

These changes revised Section 9.9.13, “Access Control Air Conditioning System,” and Table 9.9-14 of the Unit No. 2 Final Safety Analysis Report (FSAR) to better describe the current system configuration and purpose. The system is now only serving office space, lunch and locker rooms, and hallways.

Reason for the Change

These changes correct inaccuracies in the access control area Heating, Ventilation and Air Conditioning system description provided in FSAR Section 9.9.13.

Safety Evaluation Summary

These changes to the FSAR consist of clarifications added within the section text and to the Table 9.9-14 to better describe the system operation and align it more closely with FSAR Figure 9.9-4 sheet 1 and have no effect on the reliability, operation or configuration of any plant systems. This activity does not increase the probability of occurrence of a malfunction of equipment important to safety previously evaluated in the Safety Analysis Report (SAR), does not increase the consequence of a malfunction of equipment important to safety previously evaluated in the SAR, and does not create the possibility of a malfunction of a different type than any previously evaluated in the SAR. This activity is safe and does not represent an Unreviewed Safety Question.

<u>Change Number</u>	<u>Title</u>	<u>SE Number</u>
FSARCR 99-MP2-24	FSARCR for Control Room Air Conditioning (CRAC)	S2-EV-99-0029

Description of Change

This change deletes the reference to the cooling water system associated with the Control Room Air Conditioning (CRAC) system, since the system has no cooling water. The change also corrects the implication that the CRAC can be used to ventilate the control room without using mechanical cooling.

Reason for the Change

This change corrects the Final Safety Analysis Report description of the CRAC system.

Safety Evaluation Summary

The CRAC is currently designed using a mechanical refrigeration unit with air cooled condensers. A reference to “the operation of the associated cooling water system” is meaningless since there is no such system. Removing the reference to a non-existent system while making no change to the design, design requirements, or operation of the CRAC, can have no impact on the probability of a malfunction.

The changes in the description of the CRAC are consistent with its current design and applicable design bases. The changes are minor in nature and do not alter the probabilities or consequences of malfunctions or accidents and do not create the possibility of new malfunctions or accidents. This activity is safe and does not represent an Unreviewed Safety Question.

<u>Change Number</u>	<u>Title</u>	<u>SE Number</u>
FSARCR 99-MP2-28	Auxiliary Building Seam Review	S2-EV-99-0031

Description of Change

This change to the Unit No. 2 Final Safety Analysis Report (FSAR) deletes, in subsection 5.4.3.1.9, reference to Region II of the Spent Fuel Pool (SFP) and to the minimum 120 day decay time for certain fuel assemblies when a shielded cask is on the refueling floor, and revises the specified normal, accident, and ambient temperatures used for the thermal load analysis of the SFP in subsection 5.4.3.1.3.

Reason for the Change

This change corrects discrepancies in the Unit No. 2 FSAR.

Safety Evaluation Summary

This change revises the Unit No. 2 FSAR to be consistent with the currently analyzed and licensed condition of the SFP and has no effect on the reliability, operation or configuration of any plant systems. This activity does not increase the probability of occurrence of a malfunction of equipment important to safety previously evaluated in the Safety Analysis Report (SAR), does not increase the consequence of a malfunction of equipment important to safety previously evaluated in the SAR, and does not create the possibility of a malfunction of a different type than any previously evaluated in the SAR. This change does not represent an Unreviewed Safety Question and is safe.

<u>Change Number</u>	<u>Title</u>	<u>SE Number</u>
FSARCR 99-MP2-29	Update AFW Pump P9A Impeller Material	S2-EV-99-0039

Description of Change

This change to the Unit No. 2 Final Safety Analysis Report (FSAR) annotates Table 10.4-1 to indicate a change in Auxiliary Feedwater pump impeller material (to American Society for Testing and Materials A-217, Gr. CA-15).

Reason for the Change

This change updates the Unit No. 2 FSAR to reflect the current impeller material.

Safety Evaluation Summary

This change is a document change and has no effect on the reliability, operation or configuration of any plant systems. This activity does not increase the probability of occurrence of a malfunction of equipment important to safety previously evaluated in the Safety Analysis Report (SAR), does not increase the consequence of a malfunction of equipment important to safety previously evaluated in the SAR, and does not create the possibility of a malfunction of a different type than any previously evaluated in the SAR. This change is safe and does not represent an Unreviewed Safety Question.

<u>Change Number</u>	<u>Title</u>	<u>SE Number</u>
FSARCR 99-MP2-36	FSAR Changes to Section 6.7 and Appendix 1A	S2-EV-99-0005

Description of Change

This change revises Section 6.7 and Appendix 1A of the Unit No. 2 Final Safety Analysis Report (FSAR) to clarify Enclosure Building Filtration System (EBFS) and Enclosure Building Filtration Region (EBFR) functional requirements with respect to containing and collecting containment leakage following a Loss of Coolant Accident and a Rod Ejection Accident, and to clarify the EBFS system description and system reliability to account for the combined effects of wind and stack pressures on the negative pressure in the EBFR.

Reason for the Change

This change addresses the periods of time that the upper regions of the enclosure building will be at a positive pressure.

Safety Evaluation Summary

This FSAR change does not impact the design, function or configuration of the EBFS. This activity does not increase the probability of occurrence of a malfunction of equipment important to safety previously evaluated in the Safety Analysis Report (SAR), does not increase the consequence of a malfunction of equipment important to safety previously evaluated in the SAR, and does not create the possibility of a malfunction of a different type than any previously evaluated in the SAR. This activity is safe and does not represent an Unreviewed Safety Question.

<u>Change Number</u>	<u>Title</u>	<u>SE Number</u>
FSARCR 99-MP2-39	Change to FSAR Description of Sample Systems	S2-EV-99-0051

Description of Change

This change revises Sections 1.2.10.5 and 9.6 of the Unit 2 Final Safety Analysis Report (FSAR) to add descriptions of the corrosion monitoring sample station and delete the continuous pH monitor, on-line chloride monitor and silica monitor from sample station No. 2.

Reason for the Change

This change corrects discrepancies identified as the result of the FSAR/Procedure/Calculation Seam Review.

Safety Evaluation Summary

This FSAR change is a document change that corrects discrepancies identified in the FSAR. This activity does not increase the probability of occurrence of a malfunction of equipment important to safety previously evaluated in the Safety Analysis Report (SAR), does not increase the consequence of a malfunction of equipment important to safety previously evaluated in the SAR, and does not create the possibility of a malfunction of a different type than any previously evaluated in the SAR. This activity is safe and does not represent an Unreviewed Safety Question.

<u>Change Number</u>	<u>Title</u>	<u>SE Number</u>
FSARCR 99-MP2-41	Restoration of MP2 Service Water Pumps Following Intake Structure Flooding	S2-EV-99-0043

Description of Change

This change to the Unit No. 2 Final Safety Analysis Report (FSAR) eliminates references to a specific time frame by which a previously flooded service water pump motor can be dried out and restored to service and clarifies the method of restoration of the previously flooded service water pump motor(s).

Reason for the Change

This change clarifies, as described in the Unit No. 2 FSAR, the time requirement and method for restoring a previously flooded service water pump motor.

Safety Evaluation Summary

Neither the duration nor method of restoring a previously flooded service water pump motor to service has any impact on the ability to remove decay heat from the core or the spent fuel pool because restoration of a second service water pump does not impact existing failure modes and does not introduce new failure modes.

This activity does not increase the probability of occurrence of a malfunction of equipment important to safety previously evaluated in the Safety Analysis Report (SAR), does not increase the consequence of a malfunction of equipment important to safety previously evaluated in the SAR, and does not create the possibility of a malfunction of a different type than any previously evaluated in the SAR. This activity is safe and does not represent an Unreviewed Safety Question.

<u>Change Number</u>	<u>Title</u>	<u>SE Number</u>
FSARCR 99-MP2-44	Crediting Pressure Boundary Integrity of Non-Q Portions of SWS	S2-EV-99-0059

Description of Change

This activity revises Section 6.1.4.1.1.1 of the Unit No. 2 Final Safety Analysis Report (FSAR) to clarify the design basis and to credit pressure boundary integrity of both safety and non-safety related portions of piping systems during and after a postulated pipe break.

Reason for Change

This change brings the Unit No. 2 FSAR into conformance with the Licensing Basis.

Safety Evaluation Summary

The change to the FSAR does not require a change to the Technical Specifications nor the Operating License. Neither the change to the FSAR, crediting pressure boundary integrity of both safety and non-safety grade systems remote from postulated pipe breaks, nor its application to the non-safety related portion of the Service Water System will result in piping pressure boundary failures and thus will not result in an increase in the possibility or the consequences of a malfunction of equipment important to safety previously evaluated in the Safety Analysis Report (SAR). The change is consistent with Unit No. 2's license basis. As such, no new malfunctions, or malfunctions of a different type than previously evaluated in the SAR are credible. This activity is safe and does not represent an Unreviewed Safety Question.

<u>Change Number</u>	<u>Title</u>	<u>SE Number</u>
FSARCR 99-MP2-48	Section 8.7.3.1, Separation	S2-EV-99-0065

Description of Change

This activity revises Section 8.7.3.1 of the Unit No. 2 Final Safety Analysis Report (FSAR) to add non flammable heat shrinkable tubing as an item used for achieving separation inside panels.

Reason for the Change

This activity corrects a discrepancy identified by the Independent Corrective Action Verification Program and clarifies section 8.7.3.1 of the Unit No. 2 FSAR.

Safety Evaluation Summary

This FSAR change is a document change that corrects a discrepancy identified by the Independent Corrective Action Verification Program and clarifies section 8.7.3.1 of the Unit No. 2 FSAR. This activity does not increase the probability of occurrence of a malfunction of equipment important to safety previously evaluated in the SAR, does not increase the consequence of a malfunction of equipment important to safety previously evaluated in the SAR, and does not create the possibility of a malfunction of a different type than any previously evaluated in the SAR. This activity does not represent an Unreviewed Safety Question and is safe.

<u>Change Number</u>	<u>Title</u>	<u>SE Number</u>
FSARCR 99-MP2-049	FSARCR for Section 11.1, Radioactive Waste Processing System	S2-EV-99-0024

Description of Change

Chapter 11.1 of the Unit No. 2 Final Safety Analysis Report (FSAR) was updated to reflect current practices regarding degasifier operations, nitrogen addition to the waste gas surge tank, resin and filter cartridge replacement criteria, use of portable dewatering equipment, filter handling and sample point locations.

Reason for the Change

This change corrects the Unit No. 2 FSAR to reflect actual and appropriate plant procedures, operations and plant equipment.

Safety Evaluation Summary

The Radioactive Waste Processing System continues to be operated in accordance with its design. Operating procedures ensure that radioactive exposures, effluent releases, and resultant doses remain in accordance with regulatory requirements of 10 CFR Part 20 and 10 CFR 50, Appendix I to ensure that plant personnel and the public are protected.

Accident doses, controlled by Technical Specifications to be less than 10 CFR Part 100 requirements, remain unchanged. The public dose due to the malfunction of equipment important to safety, which is the simultaneous failure of the entire waste processing system excluding the high pressure portion of the gaseous waste system, also remains unchanged.

System design criteria are not compromised, the Radiological Environmental Technical Specifications and Radiological Effluent Monitoring and Offsite Dose Calculation Manual continue to ensure that releases to the environment are kept well within regulatory limits, and the Health Physics Program continues to control personnel exposure. The changes do not increase the probabilities or consequences of accidents or malfunctions of equipment important to safety, nor do they create any new accidents or malfunctions, and the margin of the safety remains unchanged. This activity is safe and does not represent an Unreviewed Safety Question.

<u>Change Number</u>	<u>Title</u>	<u>SE Number</u>
FSARCR 99-MP2-55	Containment Structure & Containment Isolation Seam Review	S2-EV-99-0074

Description of Change

This change corrects discrepancies and provides clarifications for Final Safety Analysis Report (FSAR) subsection 5.2.8.4, Table 5.2-11, and Figures 5.2-27 through 5.2-34.

Reason for the Change

This change corrects FSAR discrepancies.

Safety Evaluation Summary

This FSAR change changes the FSAR to make subsection 5.2.8, Table 5.2-11 and the isolation valve arrangement sketches (Figures 5.2-27 through 5.2-34) consistent with the currently analyzed and licensed condition of the plant as defined in the Piping and Instrumentation Drawings and plant procedures. A malfunction would have the same effect whether it occurred before the change or after it. Therefore, these proposed changes do not increase the consequences of a malfunction of equipment important to safety previously evaluated in the FSAR.

Revising cross references, piping sketches or tabulated valve data does not affect whether or not an operator or equipment performs a required function. Therefore, this proposed change does not create the possibility of a different type of malfunction than any previously evaluated in the FSAR. This activity is safe and does not represent an Unreviewed Safety Question.

<u>Change Number</u>	<u>Title</u>	<u>SE Number</u>
FSARCR 99-MP2-56	MP2 LTOP Circuitry - Clarify FSAR Description of PORV Block Valves	S2-EV-99-0028

Description of Change

A description was added to the Unit No. 2 Final Safety Analysis Report (FSAR) to clarify that the pressure operated relief valve (PORV) block valves receive an open signal upon selection of the LOW PORV setpoint.

Reason for the Change

Final Safety Analysis Report Change Request (FSARCR) 97-MP2-127 was associated with an incorrect description regarding the operation of the Low Temperature Over Pressure circuitry that was deleted yet not discussed in a safety evaluation. Corrective action taken was to review the change and provide the correct information. As a result it was concluded that an additional description should be added to the FSAR to clarify the valve circuitry description.

Safety Evaluation Summary

This change implemented additional FSAR clarifications. There were no physical plant modifications completed as a result of this change. This activity does not increase the probability of occurrence of a malfunction of equipment important to safety previously evaluated in the Safety Analysis Report (SAR), does not increase the consequence of a malfunction of equipment important to safety previously evaluated in the SAR, and does not create the possibility of a malfunction of a different type than any previously evaluated in the SAR. This activity is safe and does not represent an Unreviewed Safety Question.

<u>Change Number</u>	<u>Title</u>	<u>SE Number</u>
FSARCR 99-MP2-58	MP2 Enclosure Building Post LOCA Relative Humidity	S2-EV-99-0081

Description of Change

This activity revises the Unit No. 2 Final Safety Analysis Report (FSAR) to clarify the function of the enclosure building filtration system (EBFS), charcoal filter heaters (X-61A/B).

Reason for the Change

This activity was performed to clarify the design/qualification requirements for the EBFS heaters in the Unit No. 2 FSAR.

Safety Evaluation Summary

This FSAR change is a document change that clarifies the design/qualification requirements for the EBFS heaters in the Unit No. 2 FSAR. This activity does not increase the probability of occurrence of a malfunction of equipment important to safety previously evaluated in the Safety Analysis Report (SAR), does not increase the consequence of a malfunction of equipment important to safety previously evaluated in the SAR, and does not create the possibility of a malfunction of a different type than any previously evaluated in the SAR. This change is safe and does not represent an Unreviewed Safety Question.

<u>Change Number</u>	<u>Title</u>	<u>SE Number</u>
FSARCR 99-MP2-59	FSAR Change to Incorporate Recalculated ECCS and AFW Flows into Sections 14.6.5.1 and 14.6.5.2	E2-EV-99-0009

Description of Change

This change incorporates footnotes into Final Safety Analysis Report (FSAR) summary tables for section 14.6.5.1 Large Break Loss Of Coolant Accident (LBLOCA) and Section 14.6.5.2 Small Break Loss Of Coolant Accident (SBLOCA) analysis. A footnote was added to Table 14.6.5.1-3 to indicate that calculated values differ from the values used in the analysis and that evaluation has shown that values used in the analysis are conservatively bounding. In addition, a footnote was added to Table 14.6.5.2-3 to indicate that calculated flow rates are lower than those used in the analysis at some pressure points and that evaluations demonstrate that the effect on the analysis is insignificant.

Reason for the Change

A reanalysis of FSAR Section 14.6.5.2 for SBLOCA events was performed during the mid-cycle 13 outage using revised inputs. This reanalysis was performed in support of plant restart. A similar reanalysis was completed for FSAR Section 14.6.5.1 in reference to LBLOCA events. The results determined that the effect of such changes are insignificant or bounded by the values used in the analysis.

Safety Evaluation Summary

This activity does not increase the probability of occurrence of a malfunction of equipment important to safety previously evaluated in the Safety Analysis Report (SAR), does not increase the consequence of a malfunction of equipment important to safety previously evaluated in the SAR, and does not create the possibility of a malfunction of a different type than any previously evaluated in the SAR. This activity is safe and does not represent an Unreviewed Safety Question.

<u>Change Number</u>	<u>Title</u>	<u>SE Number</u>
FSARCR 99-MP2-60	Vital Chilled Water System	S2-EV-99-0082

Description of Change

This activity revises the Unit No. 2 Final Safety Analysis Report (FSAR) to reflect the fact that Vital chillers, X-169A/B, are not designed for a common mode failure due to the environmental conditions associated with an Appendix R or High Energy Line Break (HELB) event occurring within the Turbine Building, Fire Area R-3 (Appendix R) or Electrical Environmental Qualification (EEQ) Zone T-10 (HELB).

Reason for the Change

This activity was performed to correct the Unit No. 2 FSAR to reflect the fact that the vital chillers X-169A/B, are not credited to mitigate an appendix R or HELB event occurring within the Turbine Building, Fire Area R-3 (Appendix R) or EEQ Zone T-10 (HELB).

Safety Evaluation Summary

Both programs, Appendix R and HELB, do not credit the Vital chillers, X-169A/B during their respective events occurring within the Turbine Building, Fire Area R-3 (Appendix R) or EEQ Zone T-10 (HELB). Omission of these chillers from the list of EEQ equipment is therefore appropriate. No new accidents or malfunctions are created nor are the probabilities or consequences of existing accidents or malfunctions changed.

This activity does not increase the probability of occurrence of a malfunction of equipment important to safety previously evaluated in the Safety Analysis Report (SAR), does not increase the consequence of a malfunction of equipment important to safety previously evaluated in the SAR, and does not create the possibility of a malfunction of a different type than any previously evaluated in the SAR. This activity is safe and does not represent an Unreviewed Safety Question.

<u>Change Number</u>	<u>Title</u>	<u>SE Number</u>
FSARCR 99-MP2-73	FSAR Change to Incorporate Impact of Increased Paint Thickness on the Containment Analysis	E2-EV-99-0011

Description of Change

The Final Safety Analysis Report (FSAR) was revised to incorporate the impact of increased paint thickness on the heat structures inside of containment and on the results of the FSAR Chapter 14 Main Steam Line Break (MSLB) containment pressure analysis. The MSLB is the limiting accident with respect to maximizing containment pressure. The changes to FSAR Chapter 1, Appendix 1A, Criterion 50 and FSAR Section 5.2.3.1.3 were made to be consistent with the FSAR Chapter 14 containment pressurization analysis.

Reason for the Change

The FSAR was revised to incorporate the impact of increased paint thickness on the results of the FSAR Chapter 14 MSLB containment pressurization analysis.

Safety Evaluation Summary

The safety evaluation concluded that there was no effect on the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety as previously evaluated in the FSAR, nor was there a reduction in the margin of safety. Since the proposed change did not result in an increase in the potential to fail the containment fission product barrier, the radiological doses to the public will not be increased. As such, the change does not result in increase in the public risk, is safe, and does not involve an Unreviewed Safety Question.

<u>Change Number</u>	<u>Title</u>	<u>SE Number</u>
FSARCR 99-MP2-77	Miscellaneous Corrections to FSAR Sections on HELB Criteria	S2-EV-99-0111

Description of Change

This change to the Unit No. 2 Final Safety Analysis Report (FSAR) eliminates two cases of existing inconsistencies in Pipe Rupture Design Criteria and one case of an administrative error identified during the High Energy Line Break (HELB) Reconstitution Program. The HELB Criteria issues are the non-postulation of elongated slot type breaks at terminal ends of piping systems and the need to cite an additional exception to Bechtel's BN-TOP-2 criteria as dynamic effects associated with postulated through-wall leakage cracks are not considered for Unit No. 2.

Reason for the Change

This change ensures the consistency both within the FSAR and between it and the HELB Design Specification (SP-M2-ME-003) with regard to the methodology and assumptions used to assure adequate plant protection against pipe rupture events.

Safety Evaluation Summary

This activity does not increase the probability of occurrence of a malfunction of equipment important to safety previously evaluated in the Safety Analysis Report (SAR), does not increase the consequence of a malfunction of equipment important to safety previously evaluated in the SAR, and does not create the possibility of a malfunction of a different type than any previously evaluated in the SAR. This change is safe and does not represent an Unreviewed Safety Question.

<u>Change Number</u>	<u>Title</u>	<u>SE Number</u>
FSARCR 99-MP2-78	Organizational Change Simplification	S2-EV-99-0106

Description of Change

This change to the Unit No. 2 Final Safety Analysis Report (FSAR) removed and/or revised job titles, organizational names, job qualification criteria, and position authorities/responsibilities contained within Millstone 2 FSAR Sections 1.8.1.3, 9.10.5, and 12.1 through 12.6. The related administrative control requirements that were enclosed in the FSAR were moved into the Northeast Utilities Quality Assurance Program (NUQAP), which is another Appendix B document.

Reason for the Change

These changes were necessary to provide consistency with the new Millstone Station organizational structure and to locate all organizational information in on central document.

Safety Evaluation Summary

The changes merely move administrative control requirements from the FSAR into another Appendix B quality controlled document, the NUQAP. This activity does not increase the probability of occurrence of a malfunction of equipment important to safety previously evaluated in the SAR, does not increase the consequence of a malfunction of equipment important to safety previously evaluated in the SAR, and does not create the possibility of a malfunction of a different type than any previously evaluated in the SAR. This activity is safe and does not represent an Unreviewed Safety Question.

<u>Change Number</u>	<u>Title</u>	<u>SE Number</u>
FSARCR 99-MP2-84	FSARCR 99-MP2-84 for FSAR Section 9.10.2.1 and 9.10.6.2, Site Water Supply System Analysis of Safe Shutdown Systems and Components	S2-EV-99-0100

Description of Change

Section 9.10.2.1 of the Unit No. 2 Final Safety Analysis Report (FSAR) has been modified to remove reference to the old on site well water system as being a backup supply to the fire water tanks. This well water system has been abandoned in place and is not credited as a backup to the fire water tanks or the city water main that supplies the fire water tanks. Unit No. 2 FSAR Section 9.10.6.2 has been updated to clarify that after an Appendix R fire event, mechanical equipment such as Motor Operated Valves (MOVs) and Air Operated Valves (AOVs) are credited with manual operation.

Reason for the Change

This FSAR change was initiated to correct two errors identified in the Unit No. 2 FSAR.

Safety Evaluation Summary

The use of the site well water system is not credited in any accident or fire analysis. Crediting MOVs and AOVs manually after a fire event is an approved credited action in the Appendix R analysis. These changes were determined to be safe to implement as they did not adversely affect how systems operate to meet their design basis functions. This activity does not increase the probability of occurrence of a malfunction of equipment important to safety previously evaluated in the Safety Analysis Report (SAR), does not increase the consequence of a malfunction of equipment important to safety previously evaluated in the SAR, and does not create the possibility of a malfunction of a different type than any previously evaluated in the SAR. This activity is safe and does not represent an Unreviewed Safety Question.

Docket Nos. 50-336
50-423
B18156

Enclosure 2

Millstone Nuclear Power Station, Unit No. 3

10 CFR 50.59 Annual Report for 1999

Docket No. 50-423

Millstone Nuclear Power Station

Unit No. 3

**10 CFR 50.59
Annual Report For 1999**

January 1, 1999, through December 31, 1999

MILLSTONE UNIT NO. 3

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INTRODUCTION

None of the plant design changes, procedure changes, temporary modifications, or Final Safety Analysis Report changes described herein constitute, nor constituted an Unreviewed Safety Question per the criteria of 10CFR50.59.

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PLANT DESIGN CHANGES

CALCULATIONS

<u>CALCULATION NUMBER</u>	<u>TITLE</u>	<u>SAFETY EVALUATION</u>
SDP-SFC-01363M3	SFC Stress Data Package	S3-EV-99-0028

DESIGN CHANGE NOTICES

<u>DCN NUMBER</u>	<u>TITLE</u>	<u>SAFETY EVALUATION</u>
DM3-00-0478-98	Test and Sample Valves for 3GWS-RE48 Skip	S3-EV-99-0005
DM3-00-0773-98	P&ID EM-108C Drain Valve Location Discrepancy	S3-EV-99-0018
DM3-00-0961-98	3RCS*MV8098 installed with flow over Valve Disc.	S3-EV-98-0231
DM3-00-0005-99	Depicting Sprinkler Systems on Piping and Instrumentation Drawings	S3-EV-99-0032
DM3-00-0299-99	Coat Reactor Vessel Closure Studs	S3-EV-99-0059
DM3-00-0355-99	Replace Door C-24-1 in West Stairwell of Control Building at Elevation 24'-6"	S3-EV-99-0070
DM3-00-0385-99	3DAS*P15A/B Air Return Line Oil Collection/Drain Point	S3-EV-99-0078
DM3-00-0766-99	Installation of Fire Retardant Walls for the Hot Machine Shop in the Waste Disposal Building	S3-EV-99-0134

DESIGN CHANGE RECORDS

<u>DCR NUMBER</u>	<u>TITLE</u>	<u>SAFETY EVALUATION</u>
M3-98020	Boron Evaporator Reboiler & Bottoms Pump Seal Water Flow Control Modification	S3-EV-98-0150
M3-98023	Auxiliary Boiler Room Oil/Water Separator Alt. Discharge Path	S3-EV-98-0125
M3-98035	Replacement of Post Accident Sampling System (PASS) Liquid Sample Inlet Flow Loop Components	S3-EV-98-0242
M3-98038	Ericsson Digital, Cordless, Cellular Telephone System DCT1900 Addition to U3	S3-EV-98-0208
M3-98040	Improve Accuracy of RCS Wide Range Pressure Channels/Steam Generator W/R Level Transmitter Replacement	S3-EV-99-0003
M3-98044	Motor Operated Valves (MOV) 3SIH*MV8802A&B and 3SIL*MV8804A&B Modification	S3-EV-98-0238
M3-98045	RCS Makeup Control System Timer Setting Change	S3-EV-99-0022
M3-98047	Replacement of AFW Check Valves 3FWA*V14 & V885	S3-EV-99-0006
M3-98052	Addition of ECCS Vent Valves and CHS Test Connection	S3-EV-99-0017
M3-98053	MSIV Solenoid Design Upgrade	S3-EV-98-0243
M3-98054	Re-Route Boric Acid Tank Outlet Lines	S3-EV-98-0248
M3-99002	Revise DB/LB to Facilitate RV8119 & 123 to Discharge to a Common Header	S3-EV-99-0008
M3-99004	Replacement of Turbine Driven AFW PMP Rotating Assembly & Governor Valve 3MSS*MCV5 Stem Material Replacement	S3-EV-99-0009
M3-99007	RSS Loop Seal Continuous Vent	S3-EV-99-0015
M3-99-013	Reload Design for Millstone Unit 3 Cycle 7	E3-EV-99-0007
M3-99014	MP3 Service Water Internal Mechanical Seals	S3-EV-99-0034

MINOR MODIFICATIONS

<u>MMOD NUMBER</u>	<u>TITLE</u>	<u>SAFETY EVALUATION</u>
M1-98010	Millstone Site Radio Communication	SG-EV-98-0005
M3-98039	MP3 Service Water Piping Modifications for RFO6	S3-EV-99-0001
M3-99-018	Replacement of Emergency Notification and Response System	S3-EV-99-0066
M3-99022	Documentation of HELB Design Basis for MSLB in Turbine Building and Reconciliation of Affected Commodities	S3-EV-99-0069
M3-99023	Design and Installation of High Energy Line Break (HELB) Vestibule for Control Room East Door	S3-EV-99-0091

TECHNICAL REQUIREMENTS MANUAL CHANGES

<u>TRMCR NUMBER</u>	<u>TITLE</u>	<u>SAFETY EVALUATION</u>
99-3-1	Equipment Required for Safety Grade Cold Shutdown	S3-EV-98-0106
99-3-3	Change the unidentified sump leakage rate alarm set point to adjust for identified leakage	S3-EV-99-0030
99-3-4	Delete TRM Sections 3.4.1.2 and 3.4.1.3 Clarification	S3-EV-99-0123
99-3-5	Definition of Reactor Trip System Breakers Open for Reactor Coolant System Hot Standby and Reactor Coolant System Hot Shutdown	
99-3-6	Editorial Change to 3TRM-3.7.7 ACTION for Control Building Purge System Operation	S3-EV-99-0060
99-3-7	Accumulator Pressure and Level Instrumentation Analog Channel Operational Test Frequency Change	S3-EV-99-0049
99-3-8	Technical Requirements Manual (TRM) Revisions/Deletions for Reactivity Control Systems, Power Distribution Limits, and Instrumentation: Sections 3.1.1.3, 3.1.3.5, 3.1.3.6, 3.2.1.1, 3.2.2.1, 3.2.2.2, 3.2.3.1, and 3.3.5	S3-EV-99-0088
99-3-9		
99-3-10		
99-3-11		
99-3-12		
99-3-13		
99-3-14		
99-3-15	Safety Grade Cold Shutdown Analysis - DWST Inventory, CCP Temperature Limitations, and Spent Fuel Pool Cooling	S3-EV-97-0563
99-3-16	RSS Pump Restriction Orifices to Prevent Suction Line Flashing	S3-EV-97-0293
99-3-17	Delete 3CVS*MOV Limit Switch Heater and 3MHR-CRN3B From TRM	S3-EV-99-0104
99-3-19	Unit 3 TRM Sections 7.4 and 7.6 Changes to Reflect Cancellation of NGP 2.29	S3-EV-99-0117
99-3-20	3TRM 7.6 Safety Grade Cold Shutdown Equipment	S3-EV-99-0130
99-3-21	RIL Computer - Adjustable Upper Limit on Insertion	3TRM-3.1.3.6

PROCEDURE CHANGES

<u>PROCEDURE NUMBER</u>	<u>TITLE</u>	<u>SAFETY EVALUATION</u>
AOP 3550 Rev. 4	Turbine/Generator Trip.	E3-EV-99-0002
AOP 3555 Rev. 9	Reactor Coolant Leak	E3-EV-99-0009
AOP 3566 Rev. 6	Immediate Boration Response to Nuclear Power Generation/ATWS	E3-EV-99-0006
AOP 3566 Rev. 7	Immediate Boration	E3-EV-99-0010
AOP 3569, Rev. 13	Severe Weather Conditions	E3-EV-99-0005
AOP 3573 Rev. 9	Radiation Alarm Response	E3-EV-99-0009
EN 31028	Dilution to Criticality (IPTE)	S3-EV-99-0089
EOP 35 ES-0.1 Rev. 17	Reactor Trip	E3-EV-99-0010
EOP 35 FR-S.1 Rev. 14	Immediate Boration Response to Nuclear Power Generation/ATWS	E3-EV-99-0006
EOP 3503 Rev. 13	Shutdown Outside Control Room	E3-EV-99-0008
EOP 3504 Rev. 7	Cooldown Outside Control Room	E3-EV-99-0008
OP 3353.MB1B, Rev.1 Change 3	Main Board 1B Annunciator Response	S3-EV-98-0247
OPS Form 3635R.2-1, Chg. OTC-2	One Time Change to SP3635B.2 & OPS Form 3635B.2-2	S3-EV-99-0067
SP 3622.3, Rev. 14	Auxiliary Feedwater Pump 3FWA*P2, Operational Readiness Test	E3-EV-99-0004
SP3635B.2, Chg. OTC-2	One Time Change to SP3635B.2 & OPS Form 3635B.2-1	S3-EV-99-0067
SPROC 97-3-26R1	Charging Pump Cooler Thermal Performance Test	S3-EV-99-0103
SPROC EM99-3-9	3HVK*CHL1B Condenser Thermal Performance Test	S3-EV-99-0055

TEMPORARY MODIFICATIONS

<u>TEMP MOD NUMBER</u>	<u>TITLE</u>	<u>SAFETY EVALUATION</u>
3-86-100	Water Treatment System (WTS) Demineralizer Bypass and System Isolation	S3-EV-97-0465
3-94-0042, Rev. 1	Water Treatment System (WTS) Demineralizer Bypass and System Isolation	S3-EV-97-0465
3-95-0109	Boron Evaporator Reboiler (3BRS-P2) Seal Water Flow Switch	S3-EV-97-0394 R1
3-97-061	3ABF-TK2 Vent and Drain Modification	S3-EV-97-0464
3-98-028	Stabilization of Valve 3RCS*V132 with Separated Stem/Disc	S3-EV-98-0146R1
3-98-033	Pumps 3FWS-PI, P2A, P2B Pressure Recording/Monitoring	S3-EV-98-0170
3-98-034	Pumps 3FWS-PI, P2A, P2B Pressure Recording/Monitoring	S3-EV-98-0170
3-98-035	Pumps 3FWS-PI, P2A, P2B Pressure Recording/Monitoring	S3-EV-98-0170
3-98-049	Lifting of Field Leads and Jumper of 3GMS-PNLBDC@ATB 1 (3-4) to Eliminate Isophase Bus Trouble Annunciator	S3-EV-98-0182
3-98-054	Disconnection of the Guarded Chamber Neutron Detector Input to Gamma-Metrics Channel One	S3-EV-98-0195
3-98-056	Temporary Modification 3-98-056 Radioactive Gaseous Waste System (VRS) Header 3VRS-PCV24 Bypass Line	S3-EV-98-0196
3-98-057	Freeze Seal for 3VRS-PCV24	S3-EV-98-0215
3-99-022	Temporary Modification of Spent Fuel Assembly Handling Tool	S3-EV-99-0064
3-99-026	Installation of 3SWP*V109 without the Internals Installed	S3-EV-99-0074
3-99-028	Connection of Westinghouse Reactivity Computer	S3-EV-99-0087
3-99-034	A DSM Tank Level Indication	S3-EV-99-0127

FINAL SAFETY ANALYSIS REPORT CHANGES

<u>FSARCR NUMBER</u>	<u>TITLE</u>	<u>SAFETY EVALUATION</u>
98-MP3-114	QSS/RSS Pipe Support Modifications - Inside Containment	S3-EV-97-0041
98-MP3-118	Auxiliary Boiler Room Oil/Water Separator Alt. Discharge Path	S3-EV-98-0125
98-MP3-120	Millstone Site Radio Communication	SG-EV-98-0005
98-MP3-122	Enhancement to FSAR Table 3.9B-10 and 3.9B-11 Addition of Note for Combining Dynamic Loads	S3-EV-98-0221
98-MP3-124	Enhancement to FSAR Section 6.1.1.1 Clarification of Pressure Boundary Materials	S3-EV-98-0224
98-MP3-125	Unit 3 FSAR Section 12.5, TLD Processing	S3-EV-98-0229
99-MP3-2	FSAR Revisions for Section 15.2.6.2 and Table 15.2-2	S3-EV-98-0246
99-MP3-3	Changes to FSAR Section 3.8.1.1.4, Tables 1.8-1 and 3.2-1 for Tornado Missile Protection During Refueling	E3-EV-99-0001
99-MP3-5	3.1.2 Criterion Conformance Clarification	S3-EV-98-0232
99-MP3-10	Re-Route Boric Acid Tank Outlet Lines	S3-EV-98-0248
99-MP3-11	Improve Accuracy of RCS Wide Range Pressure Channels/Steam Generator W/R Level Transmitter Replacement	S3-EV-99-0003
99-MP3-14	Replacement of Turbine Driven AFW PMP Rotating Assembly & Governor Valve 3MSS*MCV5 Stem Material Replacement	S3-EV-99-0009
99-MP3-15	SFC Stress Data Package	S3-EV-99-0028
99-MP3-19	Change the unidentified sump leakage rate alarm set point to adjust for identified leakage	S3-EV-99-0030
99-MP3-21	Revise DB/LB to Facilitate RV8119 & 123 to Discharge to a Common Header	S3-EV-99-0008
99-MP3-23	FSARCR - References to 10CFR20 Revised to Specify Version Prior to January 1, 1994 is Applicable for Effluent Control Program	S3-EV-98-0199
99-MP3-24	MP3 Service Water Internal Mechanical Seals	S3-EV-99-0034
99-MP3-25	Organizational Changes to Chapter 13 of the FSAR	S3-EV-98-0226
99-MP3-26	Coat Reactor Vessel Closure Studs	S3-EV-99-0059
99-MP3-28	RSS PASS Inspection and Testing Requirements	S3-EV-99-0061
99-MP3-29	Replace Door C-24-1 in West Stairwell of Control Building at Elevation 24'-6"	S3-EV-99-0070
99-MP3-30	Reload Design for Millstone Unit 3 Cycle 7	E3-EV-99-0007
99-MP3-32	Clarification of FSAR Table 5.2-4 Silicon Specification	S3-EV-99-0076
99-MP3-35	Documentation of HELB Design Basis for MSLB in Turbine Building and Reconciliation of Affected Commodities	S3-EV-99-0069
99-MP3-37	Dilution to Criticality (IPTE)	S3-EV-99-0089
99-MP3-38	FSAR Organization Simplification	S3-EV-99-0081

FINAL SAFETY ANALYSIS REPORT CHANGES
(Continued)

<u>FSARCR NUMBER</u>	<u>TITLE</u>	<u>SAFETY EVALUATION</u>
99-MP3-39	Replacement of EDG Jacket Water TCV (3EGS*AOV43 A&B)	M3-96076
99-MP3-40	Boron Evaporator Reboiler & Bottoms Pump Seal Water Flow Control Modification	S3-EV-98-0150
99-MP3-41	Revision 1 (Second Ten-year Interval) of the Millstone Unit 3 Inservice Inspection Program Manual	S3-EV-99-0024
99-MP3-44	Steam Generator Blowdown System Description	S3-EV-99-0100
99-MP3-45	Temporary Modification of Spent Fuel Assembly Handling Tool	S3-EV-99-0064
99-MP3-61	Revision 2 to the MP3 BTP 9.5-1 Compliance Report (Appendix R Safe Shutdown Compliance Report)	S3-EV-98-0022

<u>Change Number</u>	<u>Title</u>	<u>SE Number</u>
CALC SDP-SFC-01363M3 FSARCR 99-MP3-15	SFC Stress Data Package	S3-EV-99-0028

Description of Change

This change modifies the allowed number of full core offloads (both Normal and Emergency) from 6 to 7 in calculation SDP-SFC-01363M3.

Reason for the Change

In the event that circumstances require a full core offload after restart from Refueling Outage 6 (RFO6), the plant licensing limits will not now be exceeded.

Safety Evaluation Summary

Based on Operational experience of RFO5 and a comparison to the present design calculations, a seventh full core offload following RFO6 will not exceed the maximum allowed normal temperature of 140^o F presently licensed as a Normal plant event. As such all structures, systems and components will experience only normal conditions. There will be no increase in probability of occurrence of a malfunction of equipment important to safety.

The Emergency and Normal full core offload scenarios are presently analyzed assuming end of pool life conditions beyond Cycle 22, i.e. full spent fuel pool except for the space required for the offload. The decay heat load associated with the performance of the seventh emergency full core offload will be less than the present design analysis at end of pool life. As such, the heat up rate and final temperature associated with a malfunction of equipment important to safety will be within present design limits. As this change stays within present design temperature limits there would be no impact on equipment and therefore no impact on consequences of any malfunctions. As the decay heat load and pool temperatures remain within present design limits, the change does not create the possibility of a malfunction of a different type than any previously evaluated in the Final Safety Analysis Report. This change is safe and does not represent an Unreviewed Safety Question.

<u>Change Number</u>	<u>Title</u>	<u>SE Number</u>
MSEE DCN DM3-00-0478-98	Test and Sample Valves for 3GWS-RE48 Skip	S3-EV-99-0005

Description of Change

This change modifies the sample and test tap closure arrangement for the process gas radiation monitoring skid (3GWS-RE48) by removing the tube cap located at the end of the sample and test taps and installing a ball valve/tube cap closure device.

Reason for the Change

System enhancement.

Safety Evaluation Summary

There are no adverse effects on the Radioactive Gaseous Waste System (GWS) as a result of this change. The new closure arrangement meets the GWS design criteria. The failure malfunction, GWS pressure boundary failure, has been evaluated for the proposed GWS system closure device change implemented by this modification and the change meets all of the original design requirements, does not increase the potential for a GWS pressure boundary failure and is fully bounded by the existing system design and analyses. Radiation monitoring skid, 3GWS-RE48 is used to monitor process gas activity levels during normal operation. In the event of a GWS pressure boundary failure, the radiation monitors located in the auxiliary building at 66' 6" elevation are used to monitor the activity levels of noble gases being released to the environment via the ventilation system during both normal and post accident operations. Additionally, 3GWS-RE48 is not one of the gaseous effluent monitors listed in Technical Specifications as required to control effluent release rates and limit offsite dose to within the Technical Specification limits. Therefore, there is no reduction in the margin of safety as defined in the basis of any technical specification. This activity is safe and does not represent an Unreviewed Safety Question.

<u>Change Number</u>	<u>Title</u>	<u>SE Number</u>
DCN DM3-00-0773-98	P&ID EM-108C Drain Valve Location Discrepancy	S3-EV-99-0018

Description of Change

This Design Change Notice (DCN) corrects Piping and Instrumentation Drawing (P&ID) EM-108C to reflect the proper connection point for Boron Recovery System (BRS) drain valves 3BRS-V721, 3BRS-V722, and 3BRS-V723. It also adds these drain valves to the appropriate piping drawings.

Reason for the Change

This DCN corrects plant documentation to be consistent with original plant design.

Safety Evaluation Summary

The affected portion of the BRS is Non Nuclear Safety, non seismic and is not safety related or radwaste QA. It does not contain equipment important to safety. The change to the P&ID will not impact system operation in any way. This change will not increase the probability of occurrence of a malfunction of equipment important to safety or create the possibility of occurrence of an accident of a different type than any previously evaluated in the Final Safety Analysis Report (FSAR). There is no increase in the consequences of any accident previously evaluated in the FSAR. This change is safe and does not present an Unreviewed Safety Question.

<u>Change Number</u>	<u>Title</u>	<u>SE Number</u>
MSEE DCN DM3-00-0961-98	3RCS*MV8098 installed with flow over Valve Disc.	S3-EV-98-0231

Description of Change

This change to plant/vendor drawings reverses the orientation of a globe valve installed in the alternative excess letdown flow path such that the letdown flow direction through the globe valve is over the valve disc rather than from below the valve seat.

Reason for the Change

This valve was installed with flow directed over the valve disc rather than from below the valve seat during plant construction and the plant/vendor drawings required revision to accurately reflect the valve's installed orientation.

Safety Evaluation Summary

This valve is a normally closed, non-active valve that performs no accident mitigation function. Changing the flow direction through this valve with flow over the valve disc rather than from below the valve seat involves a change to the alternative excess letdown path which is not required or used for accident mitigation. This change does not impact or degrade any safety system from performing its intended safety function for accident mitigation and no credit is assumed for this flow path in any plant accident analysis. Therefore, changing the flow direction through this valve has no impact on public health and safety. This activity is safe and does not represent an Unreviewed Safety Question.

Change Number

Title

SE Number

DCN DM3-00-0005-99

Depicting Sprinkler Systems on
Piping and Instrumentation Drawings

S3-EV-99-0032

Description of Change

Addition of details of the existing sprinkler equipment to the Piping and Instrumentation Drawings (P&IDs).

Reason for the Change

Adding further detail to the P&IDs to show the sprinkler equipment is an enhancement that will aid the P&ID user.

Safety Evaluation Summary

Changing the P&IDs will not adversely affect the ability of the Fire Protection System to perform its FPQA functions. Adding the sprinkler suppression portions of the Fire Protection System on the P&IDs does not affect any design basis accident or initiate any new accidents or their consequences. There is no change to plant operations. The addition of the sprinkler equipment to the appropriate P&IDs is safe, does not present an Unreviewed Safety Question, or affect the health and safety of the public.

<u>Change Number</u>	<u>Title</u>	<u>SE Number</u>
DCN DM3-00-0299-99 FSARCR 99-MP3-26	Coat Reactor Vessel Closure Studs	S3-EV-99-0059

Description of Change

This Design Change Notice (DCN) implements Westinghouse Field Change Notice NEU-40530, revision B, for reactor vessel closure studs, which adds the option to coat the threaded portions of the reactor vessel closure studs with a Mag-Ion process metal coating.

Reason for the Change

The threaded fasteners in the reactor vessel have exhibited a tendency to gall between the threads of the fasteners and the nuts or threaded cable. The Mag-Ion process coating allows the reactor vessel closure studs to be removed in the future by minimizing galling of the threads during assembly of the reactor vessel.

Safety Evaluation Summary

This process adds a thin metallic coating that will enhance the stud's anti-galling characteristics. The Mag-Ion process coating on the threaded surfaces of the reactor vessel closure studs does not require modification to any portion of the pressure boundary other than the studs. The Mag-Ion process does not affect the stud base material's bulk properties such as yield strength, hardness or elasticity and has no effect on ASME Code compliance. All existing design requirements for the reactor vessel studs remain unchanged. There are no configuration changes of the reactor vessel studs or their mating parts. The thin metallic coating applied to the threaded areas of the studs provides similar corrosion resistance to the manganese phosphate surface treatment removed in the Mag-Ion process. Therefore, the corrosion resistance of the reactor vessel studs remains the same. The proposed Mag-Ion coating for the reactor vessel studs does not alter the degree of compliance to Regulatory Guide 1.65, Rev.0. This activity does not increase the probability of occurrence of a malfunction of equipment important to safety previously evaluated in the Safety Analysis Report (SAR), does not increase the consequence of a malfunction of equipment important to safety previously evaluated in the SAR, and does not create the possibility of a malfunction of a different type than any previously evaluated in the SAR. The application of the Mag-Ion process coating to the threaded areas of the reactor vessel studs is safe and is not an Unreviewed Safety Question.

<u>Change Number</u>	<u>Title</u>	<u>SE Number</u>
DCN DM3-00-0355-99 FSARCR 99-MP3-29	Replace Door C-24-1 in West Stairwell of Control Building at Elevation 24'-6"	S3-EV-99-0070

Description of Change

The activity involves revising the swing of exterior door C-24-1 in the Control Building.

Reason for the Change

This change was made to improve access/egress into the Control Building.

Safety Evaluation Summary

Door C-24-1 itself serves no safety related or security function. The only function served by this door is to protect the Control Building from normal environmental conditions. Failure of non-safety related doors is not specifically addressed in the Final Safety Analysis Report, and multiple entry points are available for the Control Building so this change has no impact on a malfunction of equipment important to safety. This change has been determined to be safe and does not involve an Unreviewed Safety Question.

<u>Change Number</u>	<u>Title</u>	<u>SE Number</u>
DCN/MSEE DM3-00-0385-99	3DAS*P15A/B Air Return Line Oil Collection/Drain Point	S3-EV-99-0078

Description of Change

This Design Change Notice (DCN) adds an oil collection/drain point on each air return line for 3DAS*P15A/B air motor. Also, an isolation valve is labeled incorrectly on an isometric drawing which this DCN corrects.

Reason for the Change

The proposed change will help prevent oil accumulation in the 3DAS*P15A/B air motor.

Safety Evaluation Summary

The change reduces air motor failure probability because it reduces the potential for air motor excessive oil accumulation by reducing the potential for discharge line oil back flow after a maintenance oiling evolution. Therefore, there is no increase in the probability of occurrence of a malfunction of equipment important to safety previously evaluated in the Safety Analysis Report.

The piping components are passive components which have no adverse effect on piping system seismic qualification. The piping component materials are suitable for the post-accident environment in the Emergency Safety Features Building. The modification does not introduce any failure mode which could affect 3DAS*P15A and P15B, simultaneously. Therefore, single failure criteria is maintained, and a malfunction of a different type is not created. This activity is safe and does not represent an Unreviewed Safety Question.

<u>Change Number</u>	<u>Title</u>	<u>SE Number</u>
MSEE DM3-00-0766-99	Installation of Fire Retardant Walls for the Hot Machine Shop in the Waste Disposal Building	S3-EV-99-0134

Description of Change

The installation of fire retardant walls for the hot machine shop in the waste disposal building.

Reason for the Change

To bring the Hot Shop area into conformance with current practices related to the construction of partition walls and reduction of potential sources of fire and establish and document the Hot Machine Shop on the existing plant drawings for the purpose of maintaining plant configuration.

Safety Evaluation Summary

The replacement/installation of the partition walls and door in the Waste Disposal Building for the “Hot Machine Shop” does not increase the probability of occurrence of any malfunction of equipment important to safety, since there is no interaction with any safety related equipment or safety supporting equipment in this area. This activity will not increase the consequences of any malfunction of equipment important to safety, since there are no credited accident mitigating system or components in the vicinity of this activity. There is no possibility that this activity could cause a malfunction of a different type on any equipment important to safety, since the potential malfunctions of the material installed by this change are considered very unlikely. This activity does not represent an Unreviewed Safety Question and is safe.

<u>Change Number</u>	<u>Title</u>	<u>SE Number</u>
DCR M3-98020 FSARCR 99-MP3-40	Boron Evaporator Reboiler & Bottoms Pump Seal Water Flow Control Modification	S3-EV-98-0150

Description of Change

This Design Change Record (DCR) modifies the Boron Evaporator Reboiler Pump P2 and the Boron Evaporator Bottoms Pump P4 seal water control scheme.

Reason for the Change

The Boron Evaporator Reboiler and Bottoms Pump P2 & P4 seal water control systems have been plagued by operational problems. This DCR will reduce operational problems, remove an operator burden, and allow seal water flow to be throttled down to a desired value.

Safety Evaluation Summary

The installation and functional testing of the modifications will not create plant conditions which have not been previously analyzed for or create a malfunction or accident not previously considered in the analysis. The modifications will remove operational burdens associated with the Boron Recovery System and replace obsolete equipment with newer more accurate instrumentation. These modifications cannot affect any system related equipment nor the failure modes associated with any equipment important to safety. This activity is safe and does not represent an Unreviewed Safety Question.

<u>Change Number</u>	<u>Title</u>	<u>SE Number</u>
DCR M3-98023	Auxiliary Boiler Room Oil/Water Separator	S3-EV-98-0125
FSARCR 98-MP3-118	Alternate Discharge Path	

Description of Change

The normal discharge path for the Auxiliary Boiler Room Oil/Water Separator is to discharge point National Pollutant Discharge Elimination System (NPDES) DSN006 via a gravity feed drain to manhole 15. This path does not permit the discharge of water containing hydrazine. Some of the water sources to the separator contain hydrazine. Therefore, the discharge from the separator required rerouting. This Design Change Record (DCR) replaces the temporary configuration installed under BJ 3-96-108 with a new submersible pump and carbon steel piping routed from the separator to the Auxiliary Boiler Blowdown Tank.

Reason for the Change

This change was made to replace the temporary system installed by the bypass jumper with a permanent system.

Safety Evaluation Summary

There are no malfunctions of equipment important to safety, nor are there any new malfunctions/accidents that are created. The change does not increase the probability or the consequences of any accident previously evaluated in the Safety Analysis Report, nor is the margin of safety reduced. This activity does not represent an Unreviewed Safety Question and is safe.

<u>Change Number</u>	<u>Title</u>	<u>SE Number</u>
DCR M3-98035	Replacement of Post Accident Sampling System (PASS) Liquid Sample Inlet Flow Loop Components	S3-EV-98-0242

Description of Change

This change replaced all loop components associated with the Post Accident Sampling System (PASS) liquid sample inlet flow indication and modified nitrogen supply piping to the PASS nitrogen pressure valves.

Reason for the Change

The flow loop components were incapable of monitoring all flow conditions expected for PASS sampling, specifically those for Containment Recirculation Spray sump sampling and depressurized Reactor Coolant System sampling. The replacement flow loop components permit flow rate determination between 0 and 2.0 gpm with a high degree of accuracy and thus provide required PASS liquid sample flow rates for all sources of liquid samples under all conditions.

Safety Evaluation Summary

Except for the valves inside the containment and the containment isolation valves, PASS is a non nuclear safety system but is required per Technical Specifications, Specification SP-M3-IC-022 (Regulatory Guide 1.97) as a Category E3 variable for post-accident monitoring. The proposed activity will result in an enhancement to system performance and will affect only components associated with this system. There is no effect on safety related systems or components, and the consequences of this activity pose no additional radiological hazard to the public or to plant personnel. Therefore, the change is safe and does not involve an Unreviewed Safety Question.

<u>Change Number</u>	<u>Title</u>	<u>SE Number</u>
DCR M3-98038	Ericsson Digital, Cordless, Cellular Telephone System DCT1900 Addition to U3	S3-EV-98-0208

Description of Change

This Design Change Record (DCR) upgrades the Millstone Unit No. 3 (MP3) telephone system. The change adds a digital, wireless telephone system that will be connected directly into the Millstone facility's existing Private Branch Exchange (PBX) via a radio exchange. Base stations shall be installed in various locations to provide wireless coverage for MP3. [This change is complete with the exception of installation of hand rails on the telephone room roof in Warehouse/Condensate Polishing Facility Area.]

Reason for the Change

This change provides readily accessible telephone communications which will improve response to urgent situations and provides telephone coverage to certain areas within MP3 that did not have telephones.

Safety Evaluation Summary

The operation of the new 1900Mhz telephone system is consistent with the operation of the 800 MHz Carrier Frequency Trunked Radio System at MP3. The new telephone system can not cause the failure of equipment credited for equipment credited for accident mitigation. The telephone system is non-safety related and non-seismic qualified. The equipment and components are located as not to affect equipment important to safety. A seismic II over I review of the installation checks the effect on equipment important to safety. Administrative controls preclude the telephone system from initiating the malfunction of equipment. This installation, testing and use of the new digital wireless telephone system in accordance with approved procedures is safe and does not constitute an Unreviewed Safety Question.

<u>Change Number</u>	<u>Title</u>	<u>SE Number</u>
DCR M3-98040 FSARCR 99-MP3-11	Improve Accuracy of RCS Wide Range Pressure Channels/Steam Generator W/R Level Transmitter Replacement	S3-EV-99-0003

Description of Change

This change replaces the Veritrak Steam Generator Wide Range Level and Pressurizer Level transmitters and the Foxboro and Rosemount Reactor Coolant System (RCS) Wide Range Pressure transmitters and reconfigures the RCS wide range pressure loops within the 7300 Process Control Cabinets.

Reason for the Change

The Veritrak transmitters are nearing the end of their qualified life and direct replacements are not available. Replacement with Rosemounts reduces the variety of transmitter manufacturers used and eliminates associated calibration procedures and stock coding of spare parts. Replacing the RCS pressure transmitters and modification of 7300 Process Control Cabinet wiring will improve the accuracy of the overall RCS pressure instrument loop and the trip functions.

Safety Evaluation Summary

These changes do not adversely affect the ability of the affected instruments to perform their safety related indication, protection or interlock functions. These changes do not affect the probability of occurrence or the consequences of any accident or malfunction previously evaluated, do not result in any new accidents or malfunctions not previously evaluated, and do not reduce the margin of safety as defined in any Technical Specification. Therefore, these changes are considered safe and are do not create an Unreviewed Safety Question.

<u>Change Number</u>	<u>Title</u>	<u>SE Number</u>
DCR M3-98044	Motor Operated Valves (MOV) 3SIH*MV8802A&B and 3SIL*MV8804A&B Modification	S3-EV-98-0238

Description of Change

The change modified the Safety Injection High Pressure (SIH) Pump to Hot Leg Injection Valves, to close on limit switch control in lieu of torque switch control, and change the gear ratios of Residual Heat Removal (RHS) Pump Discharge to Chemical and Volume Control (CHS)/SIH Pump Suction Valves, in order to increase the thrust margins of the valves.

Reason for the Change

The above valves were previously in the GL 89-10 Alternate Test Plan. Motor Operated Valve (MOV) Target Thrust/Torque calculation assumptions for these valves were less conservative than those specified in the Motor Operated Valve Program Manual. Therefore, these valves required alternative testing to justify the less conservative assumptions. Performing these modifications increased the thrust margins for these valves and allowed them to be removed from the Alternate Test Plan.

Safety Evaluation Summary

The modifications to the SIH Pump to Hot Leg Injection Valves and the RHS Pump Discharge to CHS/SIH Pump Suction Valves do not affect any Design Basis Accident or its consequences. These modifications do not contribute to any accidents beyond those already analyzed. These modifications increase the thrust margins of the valves to comply with the Target Thrust Calculation in accordance with Generic Letter 89-10 requirements. They do not jeopardize any safety related equipment. The safety and health of the public have not been compromised, and the margin of safety remains the same. This modification is safe and does not constitute an Unreviewed Safety Question.

<u>Change Number</u>	<u>Title</u>	<u>SE Number</u>
DCR M3-98045	RCS Makeup Control System Timer Setting Change	S3-EV-99-0022

Description of Change

The purpose of this modification is to replace installed timers located at Auxiliary Relay Rack 3-RPS-RAKAUXA and adjust the time delay to 60 seconds; this will allow the circuit gain to be lowered and reduce controller output oscillations.

Reason for the Change

The modification will allow circuit gain to be adjusted to obtain optimum loop performance.

Safety Evaluation Summary

The change will not affect any previously evaluated malfunctions or create any new malfunctions. The change will not affect any previously evaluated accident, or its consequences, nor contribute to any new accidents. The modification only affects non-safety related flow deviation timers which are not credited in existing accident analyses. The margin of safety is not affected. The modification only affects non-safety related flow deviation timers which are not credited in existing accident analyses. This activity is safe and does not represent an Unreviewed Safety Question.

<u>Change Number</u>	<u>Title</u>	<u>SE Number</u>
DCR M3-98047	Replacement of AFW Check Valves 3FWA*V14 & V885	S3-EV-99-0006

Description of Change

Two of the Auxiliary Feedwater System (AFW) pump discharge lines check valves (3FWA*V14 and *V885) were replaced. Additionally, isolation valves 3FWA*V838, *V837, *V836 and *V839 were added in AFW piping downstream of check valves 3FWA*V35, *V39, *V43 and *V47 respectively.

Reason for the Change

Replacement of the two check valves was required due to historical check valve leakage, while the installation of isolation valves in the AFW pump discharge lines will facilitate maintenance of the existing AFW pump discharge check valves during power operation.

Safety Evaluation Summary

The addition of isolation valves in the Turbine Driven AFW pump discharge lines and the replacement of the existing check valves does not adversely affect the performance of the AFW system or its ability to perform its safety function. The change in system pressure drop due to the new/replaced valves is negligible and does not affect the ability of the AFW system to provide the minimum flow assumed in the accident analysis. The isolation valves will be locked open to prevent inadvertent closure of the valves and will not affect normal operation of the AFW system. The AFW pumps will still be able to meet the operational requirements of the Technical Specifications and the pumps will still be able to meet their safety function.

This change does not introduce the possibility of a new accident or malfunction, nor does it increase the probability or consequences of an accident or a malfunction. No Technical Specifications or bases are affected by this change for any mode of operation. Therefore, this change is safe and does not introduce an Unreviewed Safety Question.

<u>Change Number</u>	<u>Title</u>	<u>SE Number</u>
DCR M3-98052	Addition of ECCS Vent Valves and CHS Test Connection	S3-EV-99-0017

Description of Change

Design Change Record (DCR) M3-98052 installs four new vent valves in the Emergency Core Cooling System (ECCS) piping and a test connection in the Chemical and Volume Control System (CHS) piping.

Reason for the Change

To provide a simpler method to verify fill and venting of ECCS piping and to provide a simpler method to test a check valve in the CHS system.

Safety Evaluation Summary

These changes do not affect any Design Basis Accident or its consequences. They do not contribute to any new accidents beyond those already analyzed. Neither the ECCS vent valves nor the CHS test connection have an active function to support system operation. Pressure boundary integrity is maintained and the probability of a malfunction of equipment important to safety previously evaluated has not been impacted. These changes do not alter any previous assumption made in the radiological consequences analysis and do not affect the mitigation of radiological consequences of a malfunction of equipment described in the Final Safety Analysis Report. The failure of the vent valves and/or test connection are not malfunctions or accidents of a different type. The modification is safe and does not present an Unreviewed Safety Question.

<u>Change Number</u>	<u>Title</u>	<u>SE Number</u>
DCR M3-98053	MSIV Solenoid Design Upgrade	S3-EV-98-0243

Description of Change

The eight solenoid valves on each of the four Main Steam Isolation Valves (MSIVs) were replaced. The attenuator circuits previously installed for the number 1 solenoids and variable resistors previously installed on the number 2 solenoids were eliminated. The control switches for bypassing attenuators during surveillance testing were eliminated. Solenoid valve position indication system electrical cables and connectors were replaced. The solenoid valve position indication system was reclassified as not within the scope of the Electrical Environmental Qualification program. Also the solenoid position indication sensor was reclassified to non-seismic with respect to the indication function.

Reason for the Change

These changes were made to improve the reliability of the main steam isolation system. These solenoid valves have malfunctioned during MSIV part stroke testing causing inadvertent MSIV closure.

Safety Evaluation Summary

The MSIV solenoid modification maintains the design and licensing bases by ensuring the solenoid valves operate as intended; as such, the change is safe to implement. Given the various aspects evaluated (which included: failure mode and effects analysis; probability of equipment malfunction; probability of an accident, verification of no undesirable system interactions, effect on Final Safety Analysis Report Chapter 15 accident mitigation capabilities, code and standards used, and effect on the margin of safety as defined in the basis of technical specifications) the modification is safe, has no impact on the health or safety of the public. This activity is safe and does not represent an Unreviewed Safety Question.

<u>Change Number</u>	<u>Title</u>	<u>SE Number</u>
DCR M3-98054 FSARCR 99-MP3-10	Re-Route Boric Acid Tank Outlet Lines	S3-EV-98-0248

Description of Change

This Design Change Record (DCR) re-routes the outlet piping from the Boric Acid Batching Tank to prevent the introduction of air during the batching operation.

Reason for the Change

To eliminate the Operator burden which requires the Operator to travel to different levels of the Auxiliary Building after each boric acid batch tank dump to open and close valves and to prevent air binding of the Boric Acid Transfer Pumps during batching operations.

Safety Evaluation Summary

The re-routing of the gravity feed piping will not affect the bases for any Technical Specifications or surveillance requirements. The rerouting of the line does not affect the operation of the pump during surveillance testing and will not affect the operation of the boric acid transfer system. The Boric Acid Transfer pumps will still be able to meet the operational requirements of Technical Specifications and the pumps will still be able to perform their safety function. This modification does not increase the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the Safety Analysis Report; it does not increase the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety of a type different than any previously evaluated in the safety report; and it will not degrade the margin of safety as defined in the basis for any technical specification. This activity is safe and does not represent an Unreviewed Safety Question.

<u>Change Number</u>	<u>Title</u>	<u>SE Number</u>
DCR M3-99002 FSARCR 99-MP3-21	Revise DB/LB to Facilitate RV8119 & 123 to Discharge to a Common Header	S3-EV-99-0008

Description of Change

This change revises the Licensing and Design basis (DB/LB) via a Final Safety Analysis Report (FSAR) change to Sections 3.9B.3.3 and 9.3.4.2.5 to add text which notes that “relief valves 3CHS*RV8119, 8123, and 7006 discharge to a common header before entering the Volume Control Tank” and which states that “the common relief header has been designed and analyzed to demonstrate that adequate system relief capacity is provided in accordance with ASME Section III, NC-7512.”

Reason for the Change

Contrary to the words in section NC-3677.3(d) of the ASME code, relief valves 3CHS*RV8119, 8123 and 7006 discharge into a common 4 inch line that reduces to 3 inches before connecting to the Volume Control Tank (VCT). This has been the Millstone Unit No. 3 piping configuration for this discharge header since licensing.

Safety Evaluation Summary

It is concluded that the proposed change is safe. This activity revises the LB/DB via a documentation change (no field work) only to the FSAR. As described in Section 9 of the FSAR, the subject relief valves protect different portions of the Changing System and will not lift concurrently. Calculation 98-ENG-01596-M3, Revision 0, titled “Flow capacity and Discharge Piping Evaluation of Relief Valves 3CHS*RV8119 and 3CHS*RV8123” addressed the adequacy of the shared discharge header for all three valves (including 3CHS*RV7006) and concluded that the discharge piping is adequately sized to permit adequate pressure relief from the relief valves. It further states that the discharge header piping connection to a single 3 inch tank penetration does not compromise the functional requirements of the valves and in fact, the valves and discharge piping are oversized for the applications. Based on the above, this documentation change to the LB/DB will have no effect on the subject relief valves to perform their safety function and therefore, the probability and consequences of equipment malfunction and/or accidents previously evaluated in the Safety Analysis Report is not increased. ASME III pressure relief requirements are met. This activity is safe and does not represent an Unreviewed Safety Question.

<u>Change Number</u>	<u>Title</u>	<u>SE Number</u>
DCR M3-99004 FSARCR 99-MP3-14	Replacement of Turbine Driven AFW PMP Rotating Assembly & Governor Valve 3MSS*MCV5 Stem Material Replacement	S3-EV-99-0009

Description of Change

This design change modifies the Turbine Driven Auxiliary Feedwater Pump, 3FWA*P2, by replacing the existing impellers and wear rings with impellers having integral wear rings with a thick hard chrome plating, changes the material for the center and throttle sleeves from wrought to forged stainless steel and changes the stationary wear parts from AISI 440A, 275-350 BHN to Ni-Resist Type 2 Material. This change also rounds off the square edge end of the throttle and center shaft sleeve keyway, and changes the monorail system and governor valve stem to 718 Inconel.

Reason for the Change

The rotating assembly change is in response to a 10CFR50 Part 21 letter issued by Bingham International and NRC Information Notice 86-39 in which intergranular stress corrosion cracking was determined to be the cause of catastrophic impeller wear ring failures at other utilities on pumps similar to the Unit No. 3 Auxiliary Feedwater Pumps.

Safety Evaluation Summary

The change to ASTM A743 Gr. CA6NM improves both the tensile and toughness properties of the impeller and also exhibits improved corrosion resistance. The modification to the center and throttle shaft sleeves will reduce the stress concentration around the keyway. This change to the rotating element does not increase the probability and consequences of equipment malfunction and/or accidents previously evaluated in the Safety Analysis Report. The vendor certifies that the new parts are equivalent and/or interchangeable in fit, form and function with the original parts as supplied on the original pump order and therefore, an accident or a malfunction of a different type is not introduced.

With respect to the stem valve replacement, the valve vendor (Dresser-Rand) has developed a replacement stem made of 718 inconel suitable for form, fit and function. This material change can only improve reliability and reduce the probability and consequences of equipment malfunction and/or accidents previously evaluated in the Safety Analysis Report.

These changes do not affect the basis for the technical specification requirements for initial conditions and accident mitigating equipment. As such, there is no reduction in the margin of safety. This activity is safe and does not represent an Unreviewed Safety Question.

<u>Change Number</u>	<u>Title</u>	<u>SE Number</u>
DCR M3-99007	RSS Loop Seal Continuous Vent	S3-EV-99-0015

Description of Change

This Design Change Record (DCR) adds a continuous vent line from the local vent valves (3RSS*V890, *V891, *V892, *V893) on the horizontal portions of the Recirculation Spray System (RSS) thermal expansion loops to the opposite (upstream) side of the expansion loops in the vertical riser.

Reason for the Change

During ultrasonic surveillance testing to verify that the RSS loop seals did not contain trapped air, it was discovered that the level in the "B" loop was below the surveillance acceptance criteria. As a result of these surveillance tests, it was identified that the RSS expansion "B" loop did not meet the surveillance requirements of Technical Specifications. The loop was then required to be vented. The previous venting configuration required removing the RSS pump and heat exchanger from service, thus entering a Limited Condition of Operation.

Safety Evaluation Summary

This change eliminated the possibility of gases becoming trapped in the horizontal downstream portions of the RSS thermal expansion loops. The modification allows the recirculation spray system to perform its safety related core cooling function. The change ensures that adequate flow is provided to the core and spray headers. This modification does not increase the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report. This change also does not increase the possibility of an accident or malfunction of a different type than any previously evaluated in the safety analysis report and does not degrade the margin of safety as defined in the basis for any technical specification. The modification is safe and does not present an Unreviewed Safety Question.

<u>Change Number</u>	<u>Title</u>	<u>SE Number</u>
DCR M3-99-013 FSARCR 99-MP3-30	Reload Design for Millstone Unit 3 Cycle 7	E3-EV-99-0007

Description of Change

This change reconfigures the Millstone Unit No. 3 core for Cycle 7 operation. The core management strategy for Cycle 7 is very similar to that for Cycle 6. Changes to the fuel design for Cycle 7 fuel from the Cycle 6 are: 1) 81 feed fuel assemblies were inserted with increased outside diameters (by 0.008") and 2) modified V5H mixing vane as well as intermediate flow mixing grids, the protective bottom grid was implemented with debris trapping grids and elongated fuel rod bottom end plugs, and a mid-enriched axial blanket was implemented in the top and bottom of the fuel heated length assembly. Additional changes to the Cycle 7 core from the Cycle 6 configuration were also included. The associated changes required updates to Unit No. 3 Final Safety Analysis Report (FSAR) Chapters 4 and 6.

Reason for the Change

The Design Change to reconfigure the core (i.e., load the Cycle 7 core) is necessary in order to load fresh fuel into the core in order to allow Cycle 7 operation and the continued production of electricity by Millstone Unit No. 3. A new core and cycle of operation is necessary because the Cycle 6 core has reached a burnup value such that there is not sufficient reactivity to operate efficiently. The FSAR changes to Chapters 4 and 6 are necessary updates so that the licensing document and the plant are consistent.

Safety Evaluation Summary

Based on the Millstone top nozzle inspection performed during Refueling Outage 6 and other information available to date, there is reasonable assurance that Unit No. 3 fuel is not expected to be susceptible to spring screw failures and that it safe to operate Cycle 7 as intended. Furthermore, should spring failure occur, continued plant operation is acceptable and the failure(s) will not invalidate the Safety Analysis or result in a violation of Safety Limits. This activity is safe and does not represent an Unreviewed Safety Question.

<u>Change Number</u>	<u>Title</u>	<u>SE Number</u>
DCR M3-99014 FSARCR 99-MP3-24	MP3 Service Water Internal Mechanical Seals	S3-EV-99-0034

Description of Change

The modification described in Design Change Record (DCR) M3-99014 pertains specifically to two 26" copper nickel elbows in service water lines which showed pitting. The pitting was treated with ARCOR epoxy coating. Since ARCOR occasionally fails to maintain a permanent bond with the hose pipe, this design change installs permanent rubber sleeves with seals in the elbows as an enhancement to prevent further deterioration.

Reason for the Change

This modification greatly reduces the probability of further degradation by preventing service water from eroding the interior of these fittings.

Safety Evaluation Summary

This DCR installs internal rubber sleeves with seals in two 90 elbows that have become pitted from erosion/corrosion. Although the sleeve and seal assemblies are non QA components that will be installed in safety related piping, they will not affect the capability of the Service Water System to meet Technical Specification requirements for operability. The design change described in this DCR does not contribute to any previously analyzed accident, nor does it contribute to any new accident outside those already analyzed. The margin of safety is not reduced as a result of this change. There is no possibility of a malfunction different from any type previously evaluated associated with this modification. This activity does not represent an Unreviewed Safety Question and is safe.

<u>Change Number</u>	<u>Title</u>	<u>SE Number</u>
MMOD M1-98010 FSARCR 98-MP3-120	Millstone Site Radio Communication	SG-EV-98-0005

Description of Change

An 800 MHz trunked radio system was installed under Site Plant Design Change Request (PDCR) 6-03-94 to replace the existing 450 MHz UHF system. Site Minor Modification (MMOD) M1-98010 expands the users of the 800 MHz system to include Security and Emergency Planning and improves radio communication for Fire Protection. MMOD M1-98010 installed the base stations in the primary and secondary security stations, Technical Support Station, Condensate Polishing Facility, the Fire Protection Station, and the Emergency Operations Facility.

Reason for the Change

This modification expands the users of the 800 MHz trunked radio system and updates the Final Safety Analysis Report (FSAR) descriptions of security radios.

Safety Evaluation Summary

There is no effect on the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety as previously evaluated in the FSAR. The changes do not impact any assumptions contained in the accident analyses or reduce the margin of safety as defined in the bases for any technical specification. The 800 MHz radio system is safe and does not constitute an Unreviewed Safety Question.

<u>Change Number</u>	<u>Title</u>	<u>SE Number</u>
MMOD M3-98039	MP3 Service Water Piping Modifications for RFO6	S3-EV-99-0001

Description of Change

Installation of a flanged drain valve to an existing flanged connection on the Service Water System supply header to the Turbine Plant Component Cooling Heat Exchangers and relocation and replacement of the isolation valve from the Service Water supply header to the Spent Fuel Pool.

Reason for the Change

A larger drain valve for the Service Water System will shorten the time required to drain the system for maintenance and inspections, and relocation of the isolation valve will eliminate a four foot dead leg which been shown to be susceptible to biofouling.

Safety Evaluation Summary

The addition of a manual drain valve and the relocation and replacement of a manual isolation valve in the Service Water System do not affect the operation or performance of the ultimate heat sink. Neither of these changes affects Service Water flow rates to any heat exchangers cooled by the system. The ability of the safety related heat exchangers to remove the required heat loads following a design basis accident is unaffected. The activity is safe and does not create an Unreviewed Safety Question.

<u>Change Number</u>	<u>Title</u>	<u>SE Number</u>
MMOD M3-99-018	Replacement of Emergency Notification and Response System	S3-EV-99-0066

Description of Change

This modification replaces the existing Emergency Notification and Response System (ENRS) with an automated emergency notification and response system consisting of radiopaging, auto message, telephone and fax delivery computer system to perform Site Emergency Response Organization (SERO) and State and Local Agency emergency notification in accordance with 10CFR50 Appendix E, NUREG-0654, and the Millstone Nuclear Power Station Emergency Plan.

Reason for the Change

These modifications were required since the ENRS was not Y2K compliant and replacement parts were no longer supported by the manufacture. In addition, the performance of the SERO Notification System had not been adequate.

Safety Evaluation Summary

This activity does not increase the probability of occurrence of a malfunction of equipment important to safety previously evaluated in the Safety Analysis Report (SAR), does not increase the consequence of a malfunction of equipment important to safety previously evaluated in the SAR, and does not create the possibility of a malfunction of a different type than any previously evaluated in the SAR. These modifications do not degrade the performance of safety related systems and do not impact the margin of safety as defined in the Technical Specifications, therefore the changes are safe and do not represent an Unreviewed Safety Question.

<u>Change Number</u>	<u>Title</u>	<u>SE Number</u>
MMOD M3-99022 FSARCR 99-MP3-35	Documentation of HELB Design Basis for MSLB in Turbine Building and Reconciliation of Affected Commodities	S3-EV-99-0069

Description of Change

The subject Minor Modification (MMOD) specifies a revised High Energy Line Break (HELB) design basis for the most limiting Main Steam Line Break (MSLB) in the Turbine Building resulting in updated design and licensing basis documents including drawings, calculations, specifications and Final Safety Analysis Report (FSAR).

Reason for the Change

The subject MMOD reestablishes the correct design and licensing basis for the MSLB event in the Turbine building.

Safety Evaluation Summary

Neither the probability of occurrence nor the consequences of malfunctions or accidents are affected by these changes. Furthermore, no new malfunctions or accidents are possible as a result of these changes. The increased HELB pressure due to the MSLB in the Turbine building can be mitigated by essential equipment which is protected by boundaries qualified to sustain the loads imposed due to the initiating event. The equipment in the affected buildings and operators in the control room are adequately protected from the adverse effects of the MSLB in the Turbine Building. Essential equipment credited to mitigate design basis accidents are not affected either due to proper design or boundary protection. The changes are safe and do not represent an Unreviewed Safety Question.

<u>Change Number</u>	<u>Title</u>	<u>SE Number</u>
MMOD M3-99023	Design and Installation of High Energy Line Break (HELB) Vestibule for Control Room East Door	S3-EV-99-0091

Description of Change

The subject Minor Modification (MMOD) installs a High Energy Line Break (HELB) vestibule in the Service Building west corridor at elevation 49'6" to protect the control room east door from HELB pressure due to a Main Steam Line Break in the Turbine Building.

Reason for the Change

Installation of a vestibule capable of sustaining HELB pressure loading lowers the probability of HELB pressure breaching the control room boundary when both the control room east door and the vestibule door are open.

Safety Evaluation Summary

Neither the probability of occurrence nor the consequences of malfunctions or accidents are affected by this change. No new malfunctions or accidents are possible as a result of this change. The HELB vestibule is provided as a compensatory design feature to address the Probabilistic Risk Assessment concern regarding high usage of the control room east door. In the event that this door is unlatched concurrent with a HELB in the Turbine Building, the vestibule is capable of providing HELB barrier protection for equipment in the Control Building and operators in the control room. The equipment required to maintain the protective boundaries within the assumptions and results of the accident analysis is properly protected from the environmental effects of the Turbine Building HELB. The change is safe and does not represent an Unreviewed Safety Question.

<u>Change Number</u>	<u>Title</u>	<u>SE Number</u>
TRMCR 99-3-1 (3TRM 7.6)	Equipment Required for Safety Grade Cold Shutdown	S3-EV-98-0106

Description of Change

This change to the Unit No. 3 Technical Requirements Manual (TRM) adds the Boric Acid Tanks (3CHS*TK5A and 3CHS*TK5B) to the required Safety Grade Cold Shutdown equipment table (3TRM 7.6 Table 7.6-1), adds a new surveillance for the required Boric Acid Tank volume for Safety Grade Cold Shutdown to the SURVEILLANCE section, and adds basis information to the required Boric Acid Tank (BAT) volume for Safety Grade Cold Shutdown to the BASES section.

Reason for the Change

This change was made to ensure that a sufficient amount of usable boric acid is available in the BATs to meet Safety Grade Cold Shutdown requirements.

Safety Evaluation Summary

This change ensures that each BAT has adequate boric acid to borate to cold shutdown margin for Safety Grade Cold Shutdown so that one BAT will be available upon loss of an electrical bus or the loss of one BAT. This change does not involve any plant hardware changes and the Boric Acid System will continue to operate as designed. This activity does not increase the probability of occurrence of a malfunction of equipment important to safety previously evaluated in the Safety Analysis Report (SAR), does not increase the consequence of a malfunction of equipment important to safety previously evaluated in the SAR, and does not create the possibility of a malfunction of a different type than any previously evaluated in the SAR. This activity is safe and does not represent an Unreviewed Safety Question.

<u>Change Number</u>	<u>Title</u>	<u>SE Number</u>
TRMCR 99-3-3 FSARCR 99-MP3-19	Change the unidentified sump leakage rate alarm set point to adjust for identified leakage	S3-EV-99-0030

Description of Change

The Unit No. 3 Final Safety Analysis Report (FSAR) Section 5.2.5.2.5, item 1, and Technical Requirement Manual (TRM) OPS Form 3273-3/4.3.4.6.1 specify that the unidentified leakage sump level monitoring system alarm (sump level alarm) be set at one gallon per minute. These documents were changed to allow the sump level alarm to be set at one gallon per minute above the flow rate of identified reactor coolant and auxiliary system leakage into the sump. The FSAR was also expanded to include the containment drains sump as a collection point for identified reactor coolant leakage in containment. TRM OPS Form 3273-3/4.3.4.6.1 was also changed to make it easier to understand and to better reflect the requirements of Regulatory Guide 1.45.

Reason for the Change

This change was made to ensure that the identified leakage to the unidentified leakage sump will not mask an unidentified leakage rate of one gallon per minute; to prevent the leak rate alarm from becoming inoperable due to a decrease in the identified leakage rate; to allow some of the leakage to the unidentified leakage sump to be credited as identified leakage; to delete a possible source of confusion between the FSAR and the Technical Specifications concerning the definition of Reactor Coolant Pressure Boundary (RCPB) leakage; to be consistent in recognizing that Post Accident Sampling System flow is not collected in the unidentified leakage sump; and to clarify the TRM for when the containment drains sump level monitoring system is used to meet the Technical Specification requirement for monitoring unidentified leakage.

Safety Evaluation Summary

Changes in the sump level alarm have no effect on the operation of equipment in the containment sump so there is no change in the probability of the sump overflowing and affecting other equipment. The alarm also provides no signal to operate other equipment. Therefore there is no possibility that the change in the alarm set point will initiate a malfunction in other plant equipment. Since the alarm will continue to detect an unidentified leakage rate of 1 gpm, there is no increase in the consequences of a malfunction of the RCPB previously evaluated in the Safety Analysis Report (SAR). This activity does not increase the probability of occurrence of a malfunction of equipment important to safety previously evaluated in the SAR, does not increase the consequence of a malfunction of equipment important to safety previously evaluated in the SAR, and does not create the possibility of a malfunction of a different type than any previously evaluated in the SAR. This activity is safe and does not represent an Unreviewed Safety Question.

<u>Change Number</u>	<u>Title</u>	<u>SE Number</u>
TRMCR 99-3-4	Delete TRM Sections 3.4.1.2 and 3.4.1.3	S3-EV-99-0123
TRMCR 99-3-5	Clarification Definition of Reactor Trip System Breakers Open for Reactor Coolant System Hot Standby and Reactor Coolant System Hot Shutdown	

Description of Change

This activity deletes the clarification provided by sections 3.4.1.2 and 3.4.1.3 from the Unit No. 3 Technical Requirements Manual (TRM).

Reason for the Change

The referenced TRM sections were determined to be inappropriate based on verbatim compliance with Technical Specifications 3.4.1.2 and 3.4.1.3.

Safety Evaluation Summary

This TRM change eliminates guidance that conflicts with literal compliance with Technical Specifications and makes no changes to reactor trip system configuration or operation. This activity does not increase the probability of occurrence of a malfunction of equipment important to safety previously evaluated in the Safety Analysis Report (SAR), does not increase the consequence of a malfunction of equipment important to safety previously evaluated in the SAR, and does not create the possibility of a malfunction of a different type than any previously evaluated in the SAR. This activity is safe and does not represent an Unreviewed Safety Question.

<u>Change Number</u>	<u>Title</u>	<u>SE Number</u>
TRMCR No. 99-3-6	Editorial Change to 3TRM-3.7.7 ACTION for Control Building Purge System Operation	S3-EV-99-0060

Description of Change

Under the ACTION for LCO 3.7.7 on page 2 of 3TRM-3.7.7, Revision 2, of the Unit No. 3 Technical Requirements Manual (TRM), the bullet which requires an evaluation be made to start up the control Building Purge System as a compensatory measure was changed to read: "If allowed by LCO 3.7.7 and 3.7.8, start up the Control Building Purge System to provide ventilation."

Reason for the Change

This change was made to eliminate confusion with respect to operation of the Control Building Purge System and its effect on the Control Room Envelope (CRE).

Safety Evaluation Summary

This change involves a non-intent spelling and sentence structure correction, and an additional phrase that informs personnel to make sure TS LCO 3.7.7 and 3.7.8 permit Control Building Purge System operation. The change helps prevent operation of the Control Building Purge System at a time when that would prevent the CRE Pressurization and Control Room Emergency Ventilation Systems from performing their safety functions. This activity does not increase the probability of occurrence of a malfunction of equipment important to safety previously evaluated in the Safety Analysis Report (SAR), does not increase the consequence of a malfunction of equipment important to safety previously evaluated in the SAR, and does not create the possibility of a malfunction of a different type than any previously evaluated in the SAR. This activity is safe and does not represent an Unreviewed Safety Question.

<u>Change Number</u>	<u>Title</u>	<u>SE Number</u>
TRMCR No. 99-3-7 (3TRM 3.5.1)	Accumulator Pressure and Level Instrumentation Analog Channel Operational Test Frequency Change	S3-EV-99-0049

Description of Change

This change to Unit No. 3 Technical Requirements Manual (TRM) changes the surveillance frequency requirement for Safety Injection Accumulator Pressure and Level channels from Monthly (31 days) to Quarterly (92 days), deletes a Technical Specification Clarification regarding the removal of power to the Accumulator Isolation valves, and changes the section designation from a Technical Specification Clarification to a Technical Requirement.

Reason for the Change

This TRM change was made to allow for more efficient use of plant resources.

Safety Evaluation Summary

This change to the surveillance frequency requirement for Safety Injection Accumulator Pressure and Level channels does not alter the way in which the instrument channels function and does not affect the ability of the Accumulator tanks to provide their required safety function. This activity does not increase the probability of occurrence of a malfunction of equipment important to safety previously evaluated in the Safety Analysis Report (SAR), does not increase the consequence of a malfunction of equipment important to safety previously evaluated in the SAR, and does not create the possibility of a malfunction of a different type than any previously evaluated in the SAR. This activity is safe and does not represent an Unreviewed Safety Question.

<u>Change Number</u>	<u>Title</u>	<u>SE Number</u>
TRMCR 99-3-8	Technical Requirements Manual (TRM)	S3-EV-99-0088
TRMCR 99-3-9	Revisions/Deletions for Reactivity	
TRMCR 99-3-10	Control Systems, Power Distribution	
TRMCR 99-3-11	Limits, and Instrumentation: Sections	
TRMCR 99-3-12	3.1.1.3, 3.1.3.5, 3.1.3.6, 3.2.1.1, 3.2.2.1,	
TRMCR 99-3-13	3.2.2.2, 3.2.3.1, and 3.3.5	
TRMCR 99-3-14		

Description of Change

Seven sections of the Technical Requirements Manual (TRM) are completely deleted and one section is partially deleted: Sections 3.1.1.3, 3.1.3.5, 3.2.1.1, 3.2.2.1, 3.2.2.2, 3.2.3.1, and 3.3.5 are completely deleted, while information relating to control rod bank insertion limits in Section 3.1.3.6 is deleted (information related to the Rod Insertion Limit Monitor in this Section was not deleted).

Reason for the Change

These Technical Requirements Clarifications in the TRM are no longer necessary as they provide redundant information found in the Core Operating Limits Report and/or Technical Specifications.

Safety Evaluation Summary

Since the information deleted from the TRM exists in other controlled documents, the deletions are considered editorial in nature and have no effect on the reliability, operation or configuration of any plant systems. This activity does not increase the probability of occurrence of a malfunction of equipment important to safety previously evaluated in the Safety Analysis Report (SAR), does not increase the consequence of a malfunction of equipment important to safety previously evaluated in the SAR, and does not create the possibility of a malfunction of a different type than any previously evaluated in the SAR. This activity is safe and does not represent an Unreviewed Safety Question.

<u>Change Number</u>	<u>Title</u>	<u>SE Number</u>
TRMCR 99-3-15	Safety Grade Cold Shutdown Analysis - DWST Inventory, CCP Temperature Limitations, and Spent Fuel Pool Cooling	S3-EV-97-0563

Description of Change

This activity adds the Main Steam Pressure Relieving Bypass Valve manual open handwheels to 3TRM-7.6 of the Unit No. 3 Technical Requirements Manual (TRM).

Reason for the Change

This TRM change adds Main Steam Pressure Relieving Bypass Valve manual open handwheels to that section of the TRM containing the requirements for Safety Grade Cold Shutdown equipment not covered by Technical Specifications.

Safety Evaluation Summary

This TRM change adds Main Steam Pressure Relieving Bypass Valve manual open handwheels to 3TRM-7.6 of the TRM and has no effect on the reliability, operation or configuration of any plant systems. This activity does not increase the probability of occurrence of a malfunction of equipment important to safety previously evaluated in the Safety Analysis Report (SAR), does not increase the consequence of a malfunction of equipment important to safety previously evaluated in the SAR, and does not create the possibility of a malfunction of a different type than any previously evaluated in the SAR. This activity is safe and does not represent an Unreviewed Safety Question.

<u>Change Number</u>	<u>Title</u>	<u>SE Number</u>
TRMCR 99-3-16	RSS Pump Restriction Orifices to Prevent Suction Line Flashing	S3-EV-97-0293

Description of Change

This activity removes Motor Operated Valves 3RSS*MOV38A and 3RSS*MOV38B from the Unit No. 3 Technical Requirements Manual (TRM) Table 3.8.4.2.2-1, "Thermal Overload Protection Not Bypassed Under Accident Conditions," and adds them to TRM Table 3.8.4.2.1-1, "Thermal Overload Protection Bypassed Only Under Accident Conditions."

Reason for the Change

The TRM was not updated as required at the time a previous Document Change Record (DCR M3-97045) was implemented; this TRM change updates the TRM to conform with DCR M3-97045.

Safety Evaluation Summary

This change is a document change and has no effect on the reliability, operation or configuration of any plant systems. This activity does not increase the probability of occurrence of a malfunction of equipment important to safety previously evaluated in the Safety Analysis Report (SAR), does not increase the consequence of a malfunction of equipment important to safety previously evaluated in the SAR, and does not create the possibility of a malfunction of a different type than any previously evaluated in the SAR. This activity is safe and does not represent an Unreviewed Safety Question.

<u>Change Number</u>	<u>Title</u>	<u>SE Number</u>
TRMCR 99-3-17	Delete 3CVS*MOV Limit Switch Heater and 3MHR-CRN3B From TRM	S3-EV-99-0104

Description of Change

This change to the Technical Requirements Manual (TRM) deletes the 3CVS*MOV25 limit switch compartment heater and containment crane 3MHR-CRN3B from the list of containment penetration breakers in TRM Table 3.8.4.1.1. The primary and secondary containment penetration breakers associated with these loads are no longer tested. A correction to the Circuit Description for the motor feeder was also made in order to delete the word “heater” from the phrase “Valve Motor Heater Feeder.”

Reason for the Change

Minor Modification M3-97577 permanently removed the power from the circuit feeding the referenced Motor Operated Valve limit switch heater. This change did not consider the fact that this circuit was a Technical Specifications containment penetration circuit, therefore the TRM was not updated accordingly.

Safety Evaluation Summary

This change updates the TRM table to delete loads whose electrical power have been disconnected. Since there is no power available, the breakers will never trip on overcurrent and the penetrations will never be subjected to large electrical currents. This change does not affect the probability of occurrence of a malfunction of equipment important to safety. There is no adverse consequence of failure of the breakers since they no longer provide power to the containment penetration and the consequence of containment penetration failure has not changed. This change does not create the possibility for new malfunctions. This activity is safe and does not represent an Unreviewed Safety Question.

<u>Change Number</u>	<u>Title</u>	<u>SE Number</u>
TRMCR 99-3-19	Unit 3 TRM Sections 7.4 and 7.6 Changes to Reflect Cancellation of NGP 2.29	S3-EV-99-0117

Description of Change

Modification of Unit No. 3 Technical Requirements Manual (TRM) to refer to RP 5, "Operability Determinations," instead of NGP 2.29, "Justification for Continued Operation."

Reason for the Change

This TRM change incorporates the guidance from RP 5 as replacement for guidance in cancelled procedure NGP 2.29.

Safety Evaluation Summary

This activity is administrative in nature and does not affect any plant systems, structures or components. This activity changes the reference, for performing an engineering evaluation to determine the ability of plant systems, structures or components to support continued plant operation, from one procedure to another. This activity does not increase the probability of occurrence of a malfunction of equipment important to safety previously evaluated in the Safety Analysis Report (SAR), does not increase the consequence of a malfunction of equipment important to safety previously evaluated in the SAR, and does not create the possibility of a malfunction of a different type than any previously evaluated in the SAR. This activity is safe and does not represent an Unreviewed Safety Question.

<u>Change Number</u>	<u>Title</u>	<u>SE Number</u>
TRMCR 99-3-20	3TRM 7.6 Safety Grade Cold Shutdown Equipment	S3-EV-99-0130

Description of Change

This change to the Unit No. 3 Technical Requirements Manual (TRM) revises the surveillance frequency for confirmation of local operation capability for 3MSS*MOV74A/B/C/D, Steam Generator Atmospheric Dump Bypass Valves. The surveillance frequency has been changed from “at least once per refueling interval” to “at least once per forty-eight (48) months, with at least two valves tested every 24 months.”

Reason for the Change

This change revises the TRM to reflect the appropriate surveillance frequency for confirmation of local operation capability for 3MSS*MOV74A/B/C/D.

Safety Evaluation Summary

The change in 3MSS*MOV74A/B/C/D surveillance frequency is safe and is not an Unreviewed Safety Question because there is no discernable change in overall malfunction or accident probability. The original defense-in-depth design for Safety Grade Cold Shutdown (SGCS) is maintained and there is no change in cooldown times. This activity does not increase the probability of occurrence of a malfunction of equipment important to safety previously evaluated in the Safety Analysis Report (SAR), does not increase the consequence of a malfunction of equipment important to safety previously evaluated in the SAR, and does not create the possibility of a malfunction of a different type than any previously evaluated in the SAR. The change in 3MSS*MOV74A/B/C/D surveillance frequency is safe and is not an Unreviewed Safety Question because there is no discernable change in overall malfunction or accident probability.

<u>Change Number</u>	<u>Title</u>	<u>SE Number</u>
TRMCR 99-3-21	RIL Computer - Adjustable Upper Limit on Insertion	3TRM-3.1.3.6

Description of Change

This activity removes references to the surveillance and frequency for the Rod Insertion Limit (RIL) monitor from the Unit No. 3 Technical Requirements Manual (TRM).

Reason for the Change

This TRM change eliminates confusion regarding the surveillance/frequency requirements for the RIL monitor.

Safety Evaluation Summary

This change is a document change designed to remove confusing wording and has no effect on the reliability, operation or configuration of any plant systems. This activity does not increase the probability of occurrence of a malfunction of equipment important to safety previously evaluated in the Safety Analysis Report (SAR), does not increase the consequence of a malfunction of equipment important to safety previously evaluated in the SAR, and does not create the possibility of a malfunction of a different type than any previously evaluated in the SAR. This activity is safe and does not represent an Unreviewed Safety Question.

<u>Change Number</u>	<u>Title</u>	<u>SE Number</u>
Procedure AOP 3550 Rev. 4	Turbine/Generator Trip.	E3-EV-99-0002

Description of Change

Abnormal Operating Procedure AOP 3550 was revised to add specific guidance for a turbine trip without a reactor trip and to make other minor changes.

Reason for the Change

This procedure was revised to provide specific guidance for a turbine trip without a reactor trip.

Safety Evaluation Summary

The revision provides the appropriate guidance for mitigation of a turbine trip without a reactor trip when power is below P-9. This guidance does not adversely impact the P-9 analysis and is appropriate for control of the plant following a turbine trip without reactor trip. This procedure is used only following a turbine trip, and so this revision does not adversely impact the consequences of a turbine trip, increase the probability of a turbine trip, and cannot cause an accident. This procedural revision does not modify the failure mode of any equipment, increase the probability of a malfunction, or introduce the possibility of a malfunction of a different type. Since the revision does not instruct Operators to perform any actions that would adversely affect their ability to control plant conditions in accordance with Technical Specifications, this revision does not adversely impact the margin of safety. The revision of AOP 3550 is both safe and not an Unreviewed Safety Question.

<u>Change Number</u>	<u>Title</u>	<u>SE Number</u>
Procedure AOP 3555 Rev. 9	Reactor Coolant Leak	E3-EV-99-0009
Procedure AOP 3573 Rev. 9	Radiation Alarm Response	

Description of Change

These changes were made to include NEI-97-06 and EPRI TR-104788R1 recommendations that plant operators take actions when primary to secondary leakage exceeds 150 gallons per day (gpd) in any one steam generator (SG) or leakage in any one SG has increased by greater than 60 gpd in one hour. Additional changes were made in the steps for isolating charging and letdown to minimize the lifting of relief valves, and to upgrade the alarm response to radiation process monitors.

Reason for the Change

These changes were made to implement NEI-97-06 and EPRI TR-104788R1 recommendations, to minimize potential radiological releases from the SGs, and to make operator response consistent with the Final Safety Analysis Report (FSAR).

Safety Evaluation Summary

These changes are designed to minimize potential radiological releases. They do not impact the probability/consequences of a malfunction/accident previously analyzed in the FSAR, do not create the possibility of a malfunction/accident of a different type than previously evaluated in the FSAR, and do not reduce the margin of safety as defined in the basis of any Technical Specification. Therefore, these changes are safe and do not constitute an Unreviewed Safety Question.

<u>Change Number</u>	<u>Title</u>	<u>SE Number</u>
Procedure AOP 3566 Rev. 6 Procedure EOP 35 FR-S.1 Rev. 14	Immediate Boration Response to Nuclear Power Generation/ATWS	E3-EV-99-0006

Description of Change

These procedures have been revised to include seal injection to the “net” charging flow to the Reactor Cooling System (RCS), limiting the “net” flow to less than 75 gpm, and ensuring that the unrestricted safety injection header lineup is not used unless the Refueling Water Storage Tank (RWST) is aligned to the charging suction and the Volume Control Tank (VCT) and the Boric Acid Tank (BAT) supply lines are closed. These procedure changes also determine if a Technical Specifications surveillance is to be performed following boration and clarify that the condition for stopping immediate boration should be based on an increase in RCS boron concentration.

Reason for the Change

During boration, if offsite power is not available and the normal safety injection (SI) lineup is not used, redundant gravity drain lines from the BATs provide boric acid to the charging pump suction. The need was identified to clarify the charging flow rate when using the gravity boration flow path and to restrict usage of the SI header injection path (unrestricted) to only when the RWST is the source for the charging pump.

Safety Evaluation Summary

These procedure changes do not modify the intent of the procedures, but provide clarification to potentially confusing steps and ensure that the charging pumps are not damaged when in SI alignment or taking suction from the BAT or VCT. The changes do not direct the operator to use plant equipment in a manner inconsistent with the design and licensing bases of the plant. The conditions for stopping immediate boration were clarified to ensure the proper increase in RCS boron concentration is achieved. Thus, these changes cannot increase the probability of occurrence of a malfunction of equipment important to safety previously evaluated in the Final Safety Analysis Report (FSAR), do not create the possibility of a malfunction of a different type than any previously evaluated in the FSAR, cannot increase the consequences of accidents previously evaluated in the FSAR, and do not reduce the margin of safety as defined in the basis for any Technical Specification. This activity is safe and does not represent an Unreviewed Safety Question.

<u>Change Number</u>	<u>Title</u>	<u>SE Number</u>
Procedure AOP 3566 Rev. 7 Procedure EOP 35 ES-0.1 Rev. 17	Reactor Trip Immediate Boration	E3-EV-99-0010

Description of Change

Emergency Operating Procedure EOP 35 ES-0.1, "Reactor Trip," checks the Reactor Cooling System (RCS) cold leg temperature for the need to perform immediate boration per Abnormal Operating Procedure AOP 3566. This temperature, 530° F, had been arrived at assuming one stuck rod. The basis for this temperature has been changed to "no stuck rods" assumed. Guidance to borate for each rod not inserted and to provide limits on the maximum boration has also been added.

Reason for the Change

Millstone Unit No. 3 refueling for Cycle 7 resulted in fuel conditions that have reduced reactivity margin. Based on the Cycle 7 shutdown margin data, the RCS cold leg temperature for initiating immediate boration is impacted. Because this fuel condition is unique and applicable to Cycle 7 only, the temperature criteria for immediate boration is kept the same; the temperature basis and borating criteria were changed. This change in borating criteria is considered an enhancement to these procedures.

Safety Evaluation Summary

These changes do not change the probability that a loss of shutdown margin would occur and loss of shutdown margin due to loss of rod position indication is prevented. These changes do not affect the overall mitigation strategy. This activity is safe and does not represent an Unreviewed Safety Question.

<u>Change Number</u>	<u>Title</u>	<u>SE Number</u>
Procedure AOP 3569, Rev. 13	Severe Weather Conditions	E3-EV-99-0005

Description of Change

This procedure was revised to clarify confusing action steps when securing doors and outside equipment, to minimize operator error by directing that applicable procedure steps and other actions are reviewed with the Duty Officer prior to severe weather conditions, to stop any fuel movement if in progress during severe weather, to specify HOT STANDBY when performing cooldown and perform supporting actions, and to ensure that plant equipment is restored to normal operating plant configuration after weather condition is no longer in effect.

Reason for the Change

To minimize tornado generated missiles, to ensure that the plant is in HOT STANDBY and that the Main Steam Isolation Valves are closed prior to breaking condenser vacuum, to verify that the diesel is shut off and add additional guidance during recovery.

Safety Evaluation Summary

The changes do not modify the intent of the procedure and ensure that the probability and consequences of a malfunction and accident are not affected prior to, during and after severe weather conditions. This activity is safe and does not represent an Unreviewed Safety Question.

<u>Change Number</u>	<u>Title</u>	<u>SE Number</u>
Procedure EN 31028 FSARCR 99-MP3-37	Dilution to Criticality (IPTE)	S3-EV-99-0089

Description of Change

Steps were added to the procedure affecting valve line-up during dilution and restoration following dilution.

Reason for the Change

This change was made to ensure precise reactivity control during the dilution to criticality and minimize the mixing delays associated with the use of the Volume Control Tank (VCT).

Safety Evaluation Summary

Dilution using this method is preferred because it is inherently safer in that it does not fill the VCT with Primary Grade Water System (PGS) water. This method of dilution to criticality is more efficient for testing applications due to the precise reactivity control of primary grade water. Direct injection results in a reduction in the mixing time of water and provides a quicker response to the dilution. Additionally, the dilution becomes easier to control (i.e., no over-dilution due to the delay time of mixing with a diluted VCT). Once the PGS is isolated, there will be no additional dilution of the RCS from the VCT. This activity is inherently more conservative. This change does not involve an Unreviewed Safety Question and is safe.

<u>Change Number</u>	<u>Title</u>	<u>SE Number</u>
Procedure EOP 3503 Rev. 13	Shutdown Outside Control Room	E3-EV-99-0008
Procedure EOP 3504 Rev. 7	Cooldown Outside Control Room	

Description of Change

These procedures were revised to remove all fire related instructions and provide instructions for using all the equipment available at the Auxiliary Shutdown Panel and switchgear rooms for mitigation of non-fire events.

Reason for the Change

To bring these procedures in line with the NRC Standard Review Plan, which separates the requirements for shutdown outside the control room during a fire from the requirements for shutdown outside the control room during an event without a fire.

Safety Evaluation Summary

These changes do not impact the probability/consequences of a malfunction/accident previously analyzed in the Final Safety Analysis Report (FSAR), do not create the possibility of a malfunction/accident of a different type than previously evaluated in the FSAR, and do not reduce the margin of safety as defined in the basis of any Technical Specification. Therefore, these changes are safe and do not constitute an Unreviewed Safety Question.

<u>Change Number</u>	<u>Title</u>	<u>SE Number</u>
Procedure OP 3353.MB1B, Rev.1 Change 3	Main Board 1B Annunciator Response	S3-EV-98-0247

Description of Change

This change modifies Operating Procedure OP 3353.MB1B, "3-2 Hydrogen Supply Pressure Lo," to remove the reference to the automatic function of the hydrogen reserve bank pressure regulator to control header pressure when header pressure decreases to 90 psig and also provides further guidance to direct Operators to open the reserve bank supply isolation if header pressure drops to below 90 psig.

Reason for the Change

To ensure that there will be an available hydrogen source in the reserve tank should the normal bank become depleted, and to reduce the occurrence of activation of main board MB1B, 4-2 "Hydrogen Reserve Bank Pressure Lo" until such time as the faulty regulator can be repaired or adjusted properly.

Safety Evaluation Summary

The hydrogen system contains no safety related components or equipment necessary for safe shutdown. The capacity of the active hydrogen banks is sufficient to supply the required hydrogen demand for extended periods of time which will preclude the necessity of Operations personnel to manually align the reserve storage banks. This change has no interface with any safety related equipment and there will be no increase to public risk by this change. This change is safe and does not constitute an Unreviewed Safety Question.

<u>Change Number</u>	<u>Title</u>	<u>SE Number</u>
Procedure SP3635B.2, Chg. OTC-2 OPS Form 3635R.2-1, Chg. OTC-2	One Time Change to SP3635B.2 & OPS Form 3635B.2-1	S3-EV-99-0067

Description of Change

This change revises Surveillance Procedure SP3635B.2 to allow for increasing the pump air motor air supply pressure and increasing the pump run time duration in an attempt to demonstrate the functionality of sump pumps DAS*P15A/B.

Reason for the Change

To attempt to demonstrate the functionality of the sump pumps for restoration.

Safety Evaluation Summary

Increasing the operating pressure for the DAS (Reactor Plant Aerated Drains) sump pump air side system (i.e., the DAS sump pumps are equipped with an air motor to supply the motive force required to pump water from the sumps) to the limiting component design pressure is safe. Removal of the relief valve is safe. The planned test is within the design rating and/or acceptable pressure rating of all components. The test is only to be performed in Modes 5, 6, or 0 when the subsystem is not a required support subsystem. The DAS Engineered Safety Features building sump pumps are not required to function for any design basis accident in the planned test mode of operation. Therefore, this test is safe and does not represent an Unreviewed Safety Question.

<u>Change Number</u>	<u>Title</u>	<u>SE Number</u>
Procedure SP 3622.3, Rev. 14	Auxiliary Feedwater Pump 3FWA*P2, Operational Readiness Test	E3-EV-99-0004

Description of Change

This change adds a prerequisite and precaution for raising pressurizer level to between 38% and 50% prior to performing the full flow test for the turbine driven auxiliary feedwater (AFW) pump.

Reason for the Change

This change precludes isolation of the letdown during the AFW full flow test by ensuring that the pressurizer level remains above the letdown isolation actuation setpoint during the consequential cooldown.

Safety Evaluation Summary

Automatic letdown isolation is not explicitly modeled to mitigate any Millstone Unit No. 3 Final Safety Analysis Report (FSAR) Chapter 15 design basis accidents. The letdown is assumed to be manually isolated during a Failure of Small Lines Carrying Primary Coolant Outside Containment. Pressurizer overfill would be precluded following a heatup event at 10% core power or less for initial pressurizer water levels higher than the programmed level up to approximately 50%. Since the change assures that pressurizer level would not be increased above 50% while in Mode 3, lifting of the Pressurizer Pressure Operated Relief Valves or safety valves due to pressurizer overfill following a heatup event would not occur. Therefore, this change does not increase the probability of occurrence of a malfunction of equipment important to safety previously evaluated in the FSAR. This activity is safe and does not represent an Unreviewed Safety Question.

<u>Change Number</u>	<u>Title</u>	<u>SE Number</u>
SPROC 97-3-26R1	Charging Pump Cooler Thermal Performance Test	S3-EV-99-0103

Description of Change

This revision to Special Procedure (SPROC) 97-3-26 provides the required guidance to manipulate Service Water and Charging Pump Lube Oil Cooling System valves as required to acquire flows and temperatures across 3CCE*E1A and 3CCE*E1B in all MODEs of plant operation except MODE 4. In addition, it provides the direction and control for the installation of non-intrusive test monitoring equipment required to collect data which will be used for equipment condition assessment.

Reason for the Change

This revision allows performance of SPROC 97-3-26 in all plant MODEs except 4. The original procedure was limited to MODEs 5 and 6 only.

Safety Evaluation Summary

There is no effect on the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety as previously evaluated in the Final Safety Analysis Report, nor is there a reduction in the margin of safety. Both the Charging Pump Cooling and Service Water Systems will remain fully functional and will not be operated outside their design. This activity does not create the possibility of a malfunction of a different type than any previously evaluated in the Safety Analysis Report. This activity is safe and does not represent an Unreviewed Safety Question.

<u>Change Number</u>	<u>Title</u>	<u>SE Number</u>
SPROC EM99-3-9	3HVK*CHL1B Condenser Thermal Performance Test	S3-EV-99-0055

Description of Change

This procedure provides the direction to install, control and remove equipment which will impose a heat load on the unprotected train's chilled water system and condenser unit. It also provides direction for the installation, control and removal of the test monitoring equipment required to collect data which will be used for equipment condition assessment.

Reason for the Change

This test (SPROC EN99-3-9) is required to meet NRC Generic Letter 89-13.

Safety Evaluation Summary

The test will have no effect on the probability of the occurrence of a previously evaluated malfunction of equipment important to safety. The test poses no impact on the effects on the radiological consequences of a previously evaluated malfunction of equipment important to safety. The test operates the unprotected control building ventilation system within its design boundaries. During performance of the test, the protected component is in stand-by, ready for service if required. Additionally, control building room temperatures are monitored to ensure they are maintained within design limits.

The procedure does not place the plant in a configuration or test components outside of their design capabilities. It provides a functional test of systems capabilities for recording and analysis purposes. In addition, the test is performed on the non-protected trains of Service Water (and restricted to Operating Modes which require only a single train of service water) and Control Building Chilled Water, and controlled by Technical Specifications for control room boundaries. Consequently, there is no potential for a malfunction of a different type to occur which is different than those previously evaluated in the Safety Analysis Report. Therefore, the test is not an Unreviewed Safety Question and does not decrease the margin of safety.

<u>Change Number</u>	<u>Title</u>	<u>SE Number</u>
Temp Mod 3-86-100	Water Treatment System (WTS)	S3-EV-97-0465
Temp Mod 3-94-0042R1	Demineralizer Bypass and System Isolation	

Description of Change

Bypass Jumper (Temporary Modification) 3-86-100 modified the Water Treatment System (WTS) demineralizing tank and provides a direct path from the WTS Ultra-filtration skids to Ecolochem for final filtration and demineralization. After processing through the Ecolochem facility water can be directed to the Unit No. 3 CO storage tank, surge tank, or primary grade storage tanks. Bypass Jumper 3-94-42 installed a flange pancake in place of 3WTS-FT154 flow element. The pancake provides a positive isolation to a portion of the WTS currently not used.

Reason for the Change

Bypassing the WTS Demineralizer Package to run the Ultrafilter with the Ecolochem equipment is a system operation required to meet the strict water quality requirements. The flange pancake installed in place of flow element (FT-154) provides positive isolation from a portion of the WTS.

Safety Evaluation Summary

These changes do not affect the probability of occurrence or the consequences of any accident or malfunction. They will not introduce the potential for a new accident or malfunction beyond those already analyzed, nor will they decrease the margin of safety provided to the general public. Any failure of the subject modifications will have no effect on any of the Final Safety Analysis Report Chapter 15 accidents. These changes are safe and do not represent an Unreviewed Safety Question.

<u>Change Number</u>	<u>Title</u>	<u>SE Number</u>
Temp Mod 3-95-0109	Boron Evaporator Reboiler (3BRS-P2) Seal Water Flow Switch	S3-EV-97-0394 R1

Description of Change

This Temporary Modification jumpers out the low seal water flow alarm and associated interlock by disconnecting flow indicating switch 3BRS-FIS108. The interlock trips the Boron Evaporator Reboiler Pump (3BRS-P2) and/or prevents it from starting if there is no seal water flow. In addition, 3BRS-SOV110 is removed and replaced by a spool piece.

Reason for the Change

The existing flow indicating switch (3BRS-FIS108) does not work properly, causing spurious BRS-P2 pump trips. Replacement parts for the flow switch are not available. A design change will be completed after startup.

Safety Evaluation Summary

This temporary modification corrects a nuisance alarm/pump trip. Compensatory measures are in place to check for adequate seal flow, detect leakage, and prevent damage to the pump. The Boron Recovery System is a non-safety related system and there are no adverse impacts to equipment important to safety as a result of this modification. This activity does not increase the probability of occurrence of a malfunction of equipment important to safety previously evaluated in the Safety Analysis Report (SAR), does not increase the consequence of a malfunction of equipment important to safety previously evaluated in the SAR, and does not create the possibility of a malfunction of a different type than any previously evaluated in the SAR. This activity is safe and does not represent an Unreviewed Safety Question.

<u>Change Number</u>	<u>Title</u>	<u>SE Number</u>
Temp Mod 3-97-061	3ABF-TK2 Vent and Drain Modification	S3-EV-97-0464

Description of Change

This temporary modification alters the vent and drain from auxiliary boiler chemical addition tank 3ABF-TK2. This modification prevents water with a high hydrazine concentration from entering the floor drains and subsequently causing a National Pollutant Discharge Elimination System (NPDES) violation.

Reason for the Change

The purpose of this modification is to prevent water with a high hydrazine concentration from entering the floor drains and subsequently causing a NPDES violation.

Safety Evaluation Summary

The equipment installed is suitable for the conditions to be encountered and the auxiliary boiler chemical addition tank is not credited in any accident scenario. This temporary modification will not reduce the margin of safety as defined in the Technical Specifications and will not affect unit design basis. This modification is safe and does not involve an Unreviewed Safety Question.

<u>Change Number</u>	<u>Title</u>	<u>SE Number</u>
Temp Mod 3-98-028	Stabilization of Valve 3RCS*V132 with Separated Stem/Disc	S3-EV-98-0146R1

Description of Change

Valve 3RCS*V132 has had a stem to disc separation occur and repair efforts have failed. This valve has been reassembled and new packing has been installed in accordance with approved procedures. This configuration precludes leakage from the valve. These repairs were performed with a freeze seal in place since the valve is unisolable from the Reactor Coolant System (RCS). Valve replacement could be completed yet defueling and dewatering of the RCS would be necessary. This temporary modification will allow the existing valve to remain in place until the next refueling outage by securing the stem in a partially retracted position.

Reason for the Change

This temporary modification will allow the existing valve 3RCS*V132 (now stabilized) to remain in place until the next refueling outage by securing the stem in a partially retracted position.

Safety Evaluation Summary

This temporary modification does not affect any Design Basis Accident or its consequences. Stabilizing of the separated valve stem/disc with the stem partially retracted on the 1 1/2" globe valve (3RCS*V132) allows the flow path to continue to provide over pressure protection and prevents the piping between the check valves (3RCS*V129, *V130, and *V131) and the globe valve from being isolated and from being over pressurized due to heat-up. There is no danger of the disc leaving the valve since the disc diameter is larger than the inlet and outlet ports. This activity does not increase the probability of occurrence of a malfunction of equipment important to safety previously evaluated in the Safety Analysis Report (SAR), does not increase the consequence of a malfunction of equipment important to safety previously evaluated in the SAR, and does not create the possibility of a malfunction of a different type than any previously evaluated in the SAR. Therefore, this temporary modification is safe and does not present an Unreviewed Safety Question.

<u>Change Number</u>	<u>Title</u>	<u>SE Number</u>
Temp Mod 3-98-033	Pumps 3FWS-PI, P2A, P2B Pressure	S3-EV-98-0170
Temp Mod 3-98-034	Recording/Monitoring	
Temp Mod 3-98-035		

Description of Change

These temporary modifications each install a pair of pressure transducers on the suction and discharge on each main Feedwater pump (one at a time). One transducer is installed on the pump casing vent valve threaded connection (3FWS-V879, 881, 880) and a second on the seal water injection line vent valve threaded connection (3CNM-V870, 872, 874). The transducers are connected to a recorder to allow Condition Based Maintenance (CBM) to monitor the suction and discharge pressure pulsations as a function of pump speed/flow.

Reason for the Change

As part of the investigation into the impeller failures, the vendor indicated that monitoring of suction and discharge pressure pulsations would provide additional data to determine the root cause.

Safety Evaluation Summary

The installation of the temporary pressure transducers on the Feedwater pump suction and discharge piping will not affect the performance or operation of the pumps. This temporary equipment meets the requirements of the plant installed instrumentation. The pressure transducers meet the pressure and temperature requirements of the Feedwater and Condensate Systems where they are installed. The transducers are not electrically connected to any permanent plant instrumentation or control circuitry. This activity does not increase the probability of occurrence of a malfunction of equipment important to safety previously evaluated in the Safety Analysis Report (SAR), does not increase the consequence of a malfunction of equipment important to safety previously evaluated in the SAR, and does not create the possibility of a malfunction of a different type than any previously evaluated in the SAR. This activity is safe and does not represent an Unreviewed Safety Question.

<u>Change Number</u>	<u>Title</u>	<u>SE Number</u>
Temp Mod 3-98-049	Lifting of Field Leads and Jumper of 3GMS-PNLBDC@ATB 1 (3-4) to Eliminate Isophase Bus Trouble Annunciator	S3-EV-98-0182

Description of Change

This temporary modification lifts the leads from the field temperature switches 3GML-TS54 & TS56 to local panel 3GMS-PNLBDC (located in the Turbine Building) and installs a jumper at the two field cable terminals in 3GMS-PNLBDC.

Reason for the Change

This temporary modification was requested to eliminate the "locked-in" MB 7C annunciator caused by a grounding problem associated with the field circuit. This modification is needed until a Main Transformer A outage occurs which will allow repair of the problem.

Safety Evaluation Summary

The temperature switches provide an input on temperature rise above a set point to the local generator leads cooling panel. The particular switches monitor the three generator lead ducts (isophase bus) where they connect to the Main Transformer (MXT-A).

The bus duct cooling monitoring switches are indicators of local isophase bus temperatures rising above a set point of 160 degrees F. There are no automatic actions associated with this input. Thermocouples 3GML-TE33, 34, and 35, which input directly into the plant computer, monitor the same area, and alarm at MB 4 if the temperature rises to 150 - 160 degrees F. In addition, local temperature indicators are available. The other temperature monitoring devices throughout the isophase duct minimize the effect of losing the temperature switches above MTX-A by temporarily disconnecting them. Loss of cooling ventilation would be evident along the whole system. This activity does not increase the probability of occurrence of a malfunction of equipment important to safety previously evaluated in the Safety Analysis Report (SAR), does not increase the consequence of a malfunction of equipment important to safety previously evaluated in the SAR, and does not create the possibility of a malfunction of a different type than any previously evaluated in the SAR. This temporary modification is safe and does not result in an Unreviewed Safety Question.

<u>Change Number</u>	<u>Title</u>	<u>SE Number</u>
Temp Mod 3-98-054	Disconnection of the Guarded Chamber Neutron Detector Input to Gamma-Metrics Channel One	S3-EV-98-0195

Description of Change

This temporary modification disconnects the Guarded Fission Chamber coax cables at 3NME*AMPL1 preamplifiers A3 and A4 (Source Range) and A5 (Linear Power Range). The cable from the unguarded fission chamber will be connected to the A4 preamplifier. No cable is to be connected to the A3 preamplifier. This configuration will result in the Source Range circuitry to continuously measure neutron pulses at approximately half the indicated rate of Channel Two. The Source Range Indication circuitry was changed from two fission chambers input to one fission chamber input, the Wide Range Indication input was changed from a "Guarded" chamber to an "Unguarded" chamber, and the Linear Power Range Indication at the Fire Transfer Switch Panel was eliminated.

Reason for the Change

The output of the Guarded Fission Chamber as measured at the input of Preamplifier A4 has developed "Ringing". This phenomenon can be described as second, third, fourth, and fifth pulses being generated from the initiating neutron pulse. These ringing pulses amplitude are above the pulse height discriminator voltage and are not being discriminated and are being counted in the Source Range.

Safety Evaluation Summary

This activity does not increase the probability of occurrence of a malfunction of equipment important to safety previously evaluated in the Safety Analysis Report (SAR), does not increase the consequence of a malfunction of equipment important to safety previously evaluated in the SAR, and does not create the possibility of a malfunction of a different type than any previously evaluated in the SAR. This temporary modification is safe and not an Unreviewed Safety Question.

<u>Change Number</u>	<u>Title</u>	<u>SE Number</u>
Temp Mod 3-98-0056	Temporary Modification 3-98-056 Radioactive Gaseous Waste System (VRS) Header 3VRS-PCV24 Bypass Line	S3-EV-98-0196

Description of Change

Temporary Modification 3-98-056 adds a section of tubing between 3VRS-V996 and 3VRS-V886, which are Radioactive Gaseous Waste System (VRS) header drain valves located on either side of 3VRS-PCV24, the VRS header back pressure regulator.

Reason for the Change

This modification provides a bypass line around 3VRS-PCV24, which allows operators to manually reduce VRS header pressure. 3VRS-PCV24 is set to maintain VRS header pressure less than 4 PSIG. However, 3VRS-PCV24 does not operate properly, and a manual bypass line is desirable until the valve can be repaired or replaced.

Safety Evaluation Summary

This activity does not increase the probability of occurrence of a malfunction of equipment important to safety previously evaluated in the Safety Analysis Report (SAR), does not increase the consequence of a malfunction of equipment important to safety previously evaluated in the SAR, and does not create the possibility of a malfunction of a different type than any previously evaluated in the SAR. This modification is safe and is not an Unreviewed Safety Question.

<u>Change Number</u>	<u>Title</u>	<u>SE Number</u>
Temp Mod 3-98-057	Freeze Seal for 3VRS-PCV24	S3-EV-98-0215

Description of Change

This temporary change installs a freeze seal in the reactor plant gaseous vent header downstream of back-pressure regulator 3VRS-PCV24 and check valve 3VRS-V999 to allow for replacement of these valves.

Reason for the Change

This modification is required to provide an isolation boundary to facilitate replacement of 3VRS-PCV24 and 3VRS-V999.

Safety Evaluation Summary

The probability and consequences of potential malfunctions and accidents caused by the freeze seal installation are bounded by previously evaluated malfunctions and accidents. This activity does not increase the probability of occurrence of a malfunction of equipment important to safety previously evaluated in the Safety Analysis Report (SAR), does not increase the consequence of a malfunction of equipment important to safety previously evaluated in the SAR, and does not create the possibility of a malfunction of a different type than any previously evaluated in the SAR. This temporary modification is safe and is not an Unreviewed Safety Question.

<u>Change Number</u>	<u>Title</u>	<u>SE Number</u>
Temp Mod 3-99-022 FSARCR 99-MP3-45	Temporary Modification of Spent Fuel Assembly Handling Tool	S3-EV-99-0064

Description of Change

This temporary modification removes the indicator assembly and the reference pin from the spent fuel assembly handling tool to allow lifting of a damaged fuel assembly.

Reason for the Change

To allow for latching of the handling tool latch fingers and relocation of a damaged fuel assembly.

Safety Evaluation Summary

This change does not result in an increase in the probability of an accident or malfunction of equipment previously evaluated as the removed portions of the spent fuel handling tool are not structurally required to ensure proper lifting of a fuel assembly. The reference pin and indicator assembly are an aid to the fuel movement operator to help with proper alignment of the tool and fuel assembly, and will be compensated for by using visual inspection to ensure proper latching height to engage the tool. This change does not result in any new malfunctions as the tool will remain qualified to perform its design basis function of holding the fuel assembly. A fuel drop accident is presently evaluated as a Final Safety Analysis Report chapter 15 design basis accident. This tool is only used for the movement of fuel assemblies in the spent fuel pool. As such, modification of this tool cannot result in any new accidents. This activity does not represent an Unreviewed Safety Question and is safe.

<u>Change Number</u>	<u>Title</u>	<u>SE Number</u>
Temp Mod 3-99-026	Installation of 3SWP*V109 without the Internals Installed	S3-EV-99-0074

Description of Change

Service Water check valve, 3SWP*V109 was installed with its internal flapper plates removed.

Reason for the Change

During Refueling Outage 6 inspection for the valve, the plates were found to be broken off the hinge pin. Internal parts for this valve are not available on site and will be available at a later date.

Safety Evaluation Summary

The Millstone Unit No. 3 Service Water System flow model indicates that system pressures are such that a check valve is not required for backflow prevention in the Control Building Air Conditioning Chiller recirculation line. Recirculation flowrate as controlled by the temperature control valve will be unaffected by the removal of the check valve internals since the valve is normally open under system flow. No normal or post accident flowrates to any component cooled by the Ultimate Heat Sink is changed by this Temporary Modification. This activity is safe and does not represent an Unreviewed Safety Question.

<u>Change Number</u>	<u>Title</u>	<u>SE Number</u>
Temp Mod 3-99-028	Connection of Westinghouse Reactivity Computer	S3-EV-99-0087

Description of Change

This temporary modification involves temporary connection of the Westinghouse Advanced Digital Reactivity Computer (ADRC) in support of Vendor Procedure VPROC ENG 99-3-02 Rev. 0 “Westinghouse Advanced Digital Reactivity Computer - Calibration and Setup (ADRC-01)”.

Reason for the Change

The temporary connections of the Westinghouse ADRC are required to perform Low Power Physics Test per Vendor Procedure VPROC ENG 99-3-02 Rev. 0.

Safety Evaluation Summary

Connection of the ADRC to one T_{avg} signal and one pressurizer level signal will not affect their channel operation. Seismic review has determined that this temporary modification has no impact on the safety related equipment and their performance. Electrical review determined that use of a non-safety related receptacle for 120 Vac power to the ADRC will not impact the plant electrical distribution system. This temporary modification will not adversely affect probabilities of any accident, consequences of an accident or margin of safety. This activity is safe and does not represent an Unreviewed Safety Question.

<u>Change Number</u>	<u>Title</u>	<u>SE Number</u>
Temp Mod 3-99-034	“A” DSM Tank Level Indication	S3-EV-99-0127

Description of Change

This temporary modification involved the installation of a temporary transmitter for measuring level in the “A” moisture separator drain tank (3DSM-TK1A). This transmitter was tubed across the tank via existing valves (3DSM-V53 & 3DSM-V56) on the tank’s instrument standpipe. These valves are normally closed and capped closed.

Reason for the Change

This temporary modification allows for local monitoring of the “A” moisture separator drain tank during maintenance activities on the normal level control loop. This modification is an aid for operations to monitor tank level and maintain manual control of the moisture separator drain tank and preclude any resultant feedwater heater system oscillations from affecting plant operations.

Safety Evaluation Summary

The modification allows installation of a temporary transmitter using existing plant valves to provide reliable tank level indication for use in manually controlling secondary plant parameters. This temporary modification was installed on a secondary non-QA side, non-safety related component to facilitate operation of secondary side plant systems and in no way affects a safety related system. This activity does not increase the probability of occurrence of a malfunction of equipment important to safety previously evaluated in the Safety Analysis Report (SAR), does not increase the consequence of a malfunction of equipment important to safety previously evaluated in the SAR, and does not create the possibility of a malfunction of a different type than any previously evaluated in the SAR. This temporary modification is safe and does not constitute an Unreviewed Safety Question.

<u>Change Number</u>	<u>Title</u>	<u>SE Number</u>
FSARCR 98-MP3-114	QSS/RSS Pipe Support Modifications - Inside Containment	S3-EV-97-0041

Description of Change

This activity revises those portions of the Unit No. 3 Final Safety Analysis Report (FSAR) affected by changes to Quench Spray (QSS) and Recirculation Spray (RSS) system piping supports per Design Change Record M3-96063.

Reason for the Change

This change was made to update the FSAR to reflect changes to QSS and RSS system piping supports.

Safety Evaluation Summary

This FSAR change is a document change made to update the FSAR to reflect changes to QSS and RSS system piping supports. This activity does not increase the probability of occurrence of a malfunction of equipment important to safety previously evaluated in the Safety Analysis Report (SAR), does not increase the consequence of a malfunction of equipment important to safety previously evaluated in the SAR, and does not create the possibility of a malfunction of a different type than any previously evaluated in the SAR. This activity is safe and does not represent an Unreviewed Safety Question.

<u>Change Number</u>	<u>Title</u>	<u>SE Number</u>
FSARCR 98-MP3-122	Enhancement to FSAR Table 3.9B-10 and 3.9B-11 Addition of Note for Combining Dynamic Loads	S3-EV-98-0221

Description of Change

This activity enhances Unit No. 3 Final Safety Analysis Report (FSAR) Tables 3.9B-10 and 3.9B-11 by adding a note describing the method of combining occasional dynamic loads.

Reason for the Change

This activity is in response to an NRC recommendation that the Unit No. 3 FSAR be clarified with respect to the combination of dynamic loads in piping system analysis.

Safety Evaluation Summary

The engineering and design basis for the MP3 pipe stress analysis and support design has always considered occasional dynamic loads such as water hammer, steam hammer, safety valve discharge, etc. as being combined with seismic inertia by the Square Root Sum of the Squares method in accordance with NETM 44. The addition of a note describing the method of combining occasional dynamic loads is considered to be an enhancement to Tables 3.9B-10 and 3.9B-11 and does not deviate from the methods previously used and committed to and is in compliance with NUREG-1061. There is no increase in the risk to the public.

This activity does not increase the probability of occurrence of a malfunction of equipment important to safety previously evaluated in the Safety Analysis Report (SAR), does not increase the consequence of a malfunction of equipment important to safety previously evaluated in the SAR, and does not create the possibility of a malfunction of a different type than any previously evaluated in the SAR. This activity is safe and does not represent an Unreviewed Safety Question.

<u>Change Number</u>	<u>Title</u>	<u>SE Number</u>
FSARCR 98-MP3-124	Enhancement to FSAR Section 6.1.1.1 Clarification of Pressure Boundary Materials	S3-EV-98-0224

Description of Change

This activity enhances Section 6.1.1.1 of the Unit No. 3 Final Safety Analysis Report (FSAR) by clarifying the following statement: “Mechanical properties of the materials used in the ESF are in accordance with ASME Boiler and Pressure Vessel Code, Section II”. In order to clarify this statement, the words “pressure boundary” will be added into the sentence to limit the consideration of Section II materials to pressure boundary materials.

Reason for the Change

This change results from a review by the Independent Corrective Action Verification Program conducted by Sargent & Lundy (S&L). They concluded that the statement, “Mechanical properties of the materials used in the ESF are in accordance with ASME Boiler and Pressure Vessel Code, Section II.” meant all materials. S&L reviewed numerous Quench Spray System (QSS) and Recirculation Spray System (RSS) valves and components and found that many of these component contained materials that were not listed in ASME Section II. However, the statement is clearly meant to be applicable to mechanical properties of pressure boundary materials. Hence the addition of the words “pressure boundary” which clarifies the subject statement.

Safety Evaluation Summary

The engineering and design basis for the selections of materials for use in the RSS and QSS systems was always to use ASME, Section II materials wherever possible. The components in question have been fabricated by ASME III suppliers and have been code stamped, as applicable, in accordance with ASME III. This administrative clarification does not impact any Licensing or Design Bases of Unit No. 3. This activity is safe and does not represent an Unreviewed Safety Question.

<u>Change Number</u>	<u>Title</u>	<u>SE Number</u>
FSARCR 98-MP3-125	Unit 3 FSAR Section 12.5, TLD Processing	S3-EV-98-0229

Description of Change

Section 12.5, page 12.5-6 of the Unit No. 3 Final Safety Analysis Report (FSAR) was revised to reflect the current practice for Thermoluminescent Dosimeter (TLD) processing frequency. The frequency changed from semi-annual to quarterly.

Reason for the Change

This change was made to incorporate the determination that quarterly TLD processing is more technically prudent than semi-annual processing.

Safety Evaluation Summary

The Millstone monitoring requirements per 10CFR20 and technical specifications are unaffected by the change from semi-annual to quarterly processing. The change to the TLD badge processing frequency is unrelated to any possible malfunction evaluated or not previously evaluated since there is no impact on any system, structures or components that can relate to TLD badge processing frequencies. This activity is safe and does not represent an Unreviewed Safety Question.

<u>Change Number</u>	<u>Title</u>	<u>SE Number</u>
FSARCR 99-MP3-2	Millstone Unit 3 - FSAR Revisions for Section 15.2.6.2 and Table 15.2-2	S3-EV-98-0246

Description of Change

This change to the Unit No. 3 Final Safety Analysis Report (FSAR) involves text revisions and additions to Section 15.2.6.2, "Loss of Nonemergency AC Power to the Station Auxiliaries - Analysis of Effects and Consequences," and the addition of a footnote to Table 15.2-2, "Natural Circulation Flow," which serve to provide discussion as to the historical nature of the Table 15.2-2 data and confirm that this data is not an assumption in the accident analyses.

Reason for the Change

This change clarifies Section 15.2.6.2 and Table 15.2-2.

Safety Evaluation Summary

The changes clarify wording in the FSAR. No changes are made to procedures, tests, or the physical plant.

This activity does not increase the probability of occurrence of a malfunction of equipment important to safety previously evaluated in the Safety Analysis Report (SAR), does not increase the consequence of a malfunction of equipment important to safety previously evaluated in the SAR, and does not create the possibility of a malfunction of a different type than any previously evaluated in the SAR. This activity is safe and does not represent an Unreviewed Safety Question.

<u>Change Number</u>	<u>Title</u>	<u>SE Number</u>
FSARCR 99-MP3-3	Changes to FSAR Section 3.8.1.1.4, Tables 1.8-1 and 3.2-1 for Tornado Missile Protection During Refueling	E3-EV-99-0001

Description of Change

An update was made to the Unit No. 3 Final Safety Analysis Report (FSAR) Section 3.8.1.1.4 and Tables 1.8-1 and 3.2-1 which does not require the removable concrete tornado missile shield blocks to be reinstalled during refueling operations. The changes made the FSAR consistent with the plant practice of not removing the tornado missile shield blocks during MODEs 5 and 6 operation.

Reason for the Change

Condition Report (CR) M3-98-4114 identified the following discrepancy: Containment Fuel Handling System (FHS) may not be protected from the design basis tornado missile. During refueling activities, the equipment hatch tornado missile shield has not been required to be installed in front of the equipment hatch even though it is unlikely that the hatch would be able to withstand a design basis postulated tornado missile.

Safety Evaluation Summary

The conclusion of a probabilistic analysis associated with the probability of the hatch undergoing significant damage and causing a release of radioactivity in excess of 10CFR100 limits indicate that it would occur within the NRC's numerical acceptance criterion for a conservative Probabilistic Risk Assessment as specified in Standard Review Plan 2.2.3.

The safety evaluation concludes that there is no effect on the probability of occurrence of a fuel handling accident described in the FSAR (Section 15.7.4) or the consequences of an accident or malfunction analyzed in the Safety Analysis Report, they do not create the possibility of a different type of malfunction or accident, nor is there a reduction in the margin of safety. The changes have been reviewed and found to be safe and do not represent an Unreviewed Safety Question.

<u>Change Number</u>	<u>Title</u>	<u>SE Number</u>
FSARCR 99-MP3-5	3.1.2 Criterion Conformance Clarification	S3-EV-98-0232

Description of Change

This change modifies a sentence in Section 3.1.2.12 of the Unit No. 3 Final Safety Analysis Report (FSAR) from “Power oscillations of the fundamental mode are inherently eliminated by the negative power coefficient of reactivity” to “Total power oscillations of the fundamental mode are inherently stable by the negative power coefficient of reactivity.”

Reason for the Change

This change brings the wording of Subsection 3.1.2.12 of the Unit No. 3 FSAR into clear conformance with General Design Criteria 12, “Suppression of Reactor Power Oscillations” and makes this section of the FSAR consistent with other FSAR sections dealing with stability.

Safety Evaluation Summary

The changes clarify wording in the FSAR and make Section 3.1.2.12 consistent with the other sections of the FSAR that are related to stability (Section 4.3.1.6 and Section 4.3.1.7). No physical changes are made to the plant. No changes were made to procedures or tests.

This activity does not increase the probability of occurrence of a malfunction of equipment important to safety previously evaluated in the Safety Analysis Report (SAR), does not increase the consequence of a malfunction of equipment important to safety previously evaluated in the SAR, and does not create the possibility of a malfunction of a different type than any previously evaluated in the SAR. This activity is safe and does not represent an Unreviewed Safety Question.

<u>Change Number</u>	<u>Title</u>	<u>SE Number</u>
FSARCR 99-MP3-23	References to 10CFR20 Revised to Specify Version Prior to January 1, 1994 is Applicable for Effluent Control Program	S3-EV-98-0199

Description of Change

The Unit No. 3 Final Safety Analysis Report (FSAR) was revised to clarify that the version of 10CFR20 prior to January 1, 1994, is applicable for radiological effluent controls.

Reason for the Change

This change clarifies the Unit No. 3 FSAR to reflect that the version of 10CFR20 prior to January 1, 1994, is applicable for radiological effluent controls.

Safety Evaluation Summary

The change only adds words to the FSAR to clarify which version of 10CFR20 is applicable to the effluent control program. There is no effect on the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety as previously evaluated in the FSAR, nor is there a reduction in the margin of safety since no part of the program is changed and no procedure or equipment is altered. This activity does not represent an Unreviewed Safety Question and is safe.

<u>Change Number</u>	<u>Title</u>	<u>SE Number</u>
FSARCR 99-MP3-25	Organizational Changes to Chapter 13 of the FSAR	S3-EV-98-0226

Description of Change

This change implemented various organizational changes as to the make up of the Millstone Station Nuclear Group. These changes included: elimination of various management positions, reporting changes to revised supervision, creation of some officer positions, and title modifications.

Reason for the Change

The organization at Millstone Station has been modified from a recovery organization to an operational organization with a focus on safety and deregulation of the electric utilities. Millstone Station must develop an organization to produce power as economically and safely as possible while ensuring compliance with all state and federal regulations.

Safety Evaluation Summary

The changes are administrative in nature and do not affect any system, structure, or component at the facility. This activity does not increase the probability of occurrence of a malfunction of equipment important to safety previously evaluated in the Safety Analysis Report (SAR), does not increase the consequence of a malfunction of equipment important to safety previously evaluated in the SAR, and does not create the possibility of a malfunction of a different type than any previously evaluated in the SAR. The implementation of the organizational changes do not constitute an Unreviewed Safety Question and is safe.

<u>Change Number</u>	<u>Title</u>	<u>SE Number</u>
FSARCR 99-MP3-28	RSS PASS Inspection and Testing Requirements	S3-EV-99-0061

Description of Change

This change revises Section 9.3.2.6.4 of the Unit No. 3 Final Safety Analysis Report (FSAR) to reflect a refueling outage frequency for demonstrating Containment Recirculation Spray System (RSS) Post Accident Sampling System (PASS) sample capability. Additionally, it provides additional information/clarification regarding testing of the reactor coolant post-accident sample module using the Reactor Coolant System (RCS) or the RSS, and testing of the Containment Air Post-Accident Sample Module.

Reason for the Change

This change satisfies a commitment made to the NRC.

Safety Evaluation Summary

Modification of the inspection and testing requirements for the RSS PASS sample will not increase the probability of occurrence of a malfunction of equipment important to safety previously evaluated in the Safety Analysis Report (SAR). The equipment used to obtain a RSS PASS sample is non-safety related, non-seismic, commercial grade equipment, with the exception of two safety related Target Rock Corporation valves (3SSP*SOV25A/B). All PASS solenoid valves have been exercised on an increased frequency (i.e., monthly) in accordance with the Maintenance Rule (a) (1) action plan for PASS. It is through implementation of the Maintenance Rule (a) (1) action plan that the probability of occurrence of a malfunction of equipment important to safety previously evaluated in the SAR will not be increased.

The activity does not increase the consequence of a malfunction of equipment important to safety previously evaluated in the SAR. The RSS PASS is not used to direct operator actions in response to a malfunction of equipment important to safety using other systems or to mitigate a malfunction of any equipment important to safety.

Modification of the testing requirement for the RSS PASS will not create the possibility of a malfunction of a different type than previously evaluated. This activity is safe and does not represent an Unreviewed Safety Question.

<u>Change Number</u>	<u>Title</u>	<u>SE Number</u>
FSARCR 99-MP3-32	Clarification of FSAR Table 5.2-4 Silicon Specification	S3-EV-99-0076

Description of Change

Final Safety Analysis Report (FSAR) Table 5.2-4, Reactor Coolant Water Chemistry Specification, was changed to delete the silica limit of 1.0 ppm and to delete the note, note 6, with this limit.

Reason for the Change

Deleting silica from the FSAR is a clarification of the licensing basis and allows silica to be controlled in accordance with the Westinghouse and industry water chemistry guidelines.

Safety Evaluation Summary

There is no Technical Specification limit on silica because it does not effect the reactor coolant pressure boundary. Therefore, deleting silica from FSAR Table 5.2-4 is consistent with the Technical Specifications.

Silica forms zeolites in the presence of magnesium, calcium or aluminum. Zeolites have a reverse solubility. Therefore, it has been theorized that zeolites would preferentially plate out on hot spots on fuel, causing the formation of a hard crud and localized reduction in heat transfer. However, the initial condition for accident analysis is controlled by Technical Specification 3.4.8 and the assumptions for fuel failures after an accident are independent of silica zeolite formations. Therefore, the consequences of an accident are not affected by changes in silica concentrations. Also, fuel leaks, within the limits of the Technical Specification, cannot cause an accident. Therefore, deleting the silica limit for the FSAR cannot increase the frequency or consequences of a previously analyzed accident nor can it cause an accident of a different type.

Deleting the silica limit and the associated note from the FSAR will not increase the likelihood of crud deposition and will not increase the likelihood of fuel failures. This activity is safe and does not represent an Unreviewed Safety Question.

<u>Change Number</u>	<u>Title</u>	<u>SE Number</u>
FSARCR 99-MP3-38	FSAR Organization Simplification	S3-EV-99-0081

Description of Change

This change to Sections 12.5 (Health Physics Program) and 13.1 through 13.5 (Organizational Structure) of the Millstone Unit No. 3 Final Safety Analysis Report removes or revises job titles, organization names, job qualification criteria and position authorities.

Reason for the Change

The changes (with one exception) are administrative in nature and are necessary to provide consistency with the new Millstone Station organization structure. The one exception was implemented to minimize duplication of information.

Safety Evaluation Summary

This administrative change will not increase the probability of occurrence of a malfunction because it is not associated with equipment. The change does not decrease the reliability of components or cause a degradation in any system design specifications.

This change focuses in the onsite review committees and the procedure review process which does not affect equipment important to safety previously evaluated in the Safety Analysis Report.

The change will not increase the consequences of a malfunction because no equipment or equipment failure modes are affected by this change.

The change will not affect the equipment or an operator's ability to perform a function, nor will it create a malfunction of a different type.

This activity is safe and does not represent an Unreviewed Safety Question.

<u>Change Number</u>	<u>Title</u>	<u>SE Number</u>
FSARCR 99-MP3-39	Replacement of EDG Jacket Water TCV (3EGS*AOV43 A&B)	M3-96076

Description of Change

Design Change Record (DCR) replaced the Emergency Diesel Generator's (EDG) jacket water temperature controls valve (3EGS*AOV43A & B) with thermostatic valves (3EGS*TCV50A & B) that are appropriate for the installation and their safety class. The Unit No. 3 Final Safety Analysis Report (FSAR) was updated to reflect this change.

Reason for the Change

A response to an Independent Corrective Action Verification Program (ICAVP) issue noted that a previous FSAR Change Request (FSARCR) (96-61) mistakenly added the subject valves to a list of Non-ASME III components in the Emergency Diesel Generator System. FSARCR 99-MP3-39 corrects this error.

Safety Evaluation Summary

This FSAR change is a document change that corrects a discrepancy in the FSAR. This activity does not increase the probability of occurrence of a malfunction of equipment important to safety previously evaluated in the Safety Analysis Report (SAR), does not increase the consequence of a malfunction of equipment important to safety previously evaluated in the SAR, and does not create the possibility of a malfunction of a different type than any previously evaluated in the SAR. This activity does not represent an Unreviewed Safety Question and is safe.

<u>Change Number</u>	<u>Title</u>	<u>SE Number</u>
FSARCR 99-MP3-41	Revision 1 (Second Ten-year Interval) of the Millstone Unit 3 Inservice Inspection Program Manual	S3-EV-99-0024

Description of Change

The Millstone Unit No. 3 Final Safety Analysis Report (FSAR) was revised to reflect revision of the Unit No. 3 Inservice Inspection Manual (Program Manual).

Reason for the Change

This change was made to bring the Unit No. 3 FSAR into conformance with the Unit No. 3 Inservice Inspection Manual (Program Manual).

Safety Evaluation Summary

The FSAR changes are to correct the specific references to American Society of Mechanical Engineers (ASME) Code editions or addenda that will no longer apply to Revision 1 to the manual, and must be corrected to agree with the requirements of 10CFR50.55a. This activity does not increase the probability of occurrence of a malfunction of equipment important to safety previously evaluated in the Safety Analysis Report (SAR), does not increase the consequence of a malfunction of equipment important to safety previously evaluated in the SAR, and does not create the possibility of a malfunction of a different type than any previously evaluated in the SAR. This activity does not represent an Unreviewed Safety Question and is safe.

<u>Change Number</u>	<u>Title</u>	<u>SE Number</u>
FSARCR 99-MP3-44	Steam Generator Blowdown System Description	S3-EV-99-0100

Description of Change

The Millstone Unit No. 3 Final Safety Analysis Report (FSAR) was revised to change the description of the steam generator liquid flow path to the condenser hotwell from “open” cycle operation to the correct “closed” cycle operation.

Reason for the Change

This change was made to provide for administrative updating of the FSAR to accurately identify the steam generator liquid flow path to the condenser hotwell as closed cycle blowdown.

Safety Evaluation Summary

This change only provides an accurate description of the blowdown system to the FSAR. This activity does not increase the probability of occurrence of a malfunction of equipment important to safety previously evaluated in the Safety Analysis Report (SAR), does not increase the consequence of a malfunction of equipment important to safety previously evaluated in the SAR, and does not create the possibility of a malfunction of a different type than any previously evaluated in the SAR. This activity does not represent an Unreviewed Safety Question and is safe.

<u>Change Number</u>	<u>Title</u>	<u>SE Number</u>
FSARCR 99-MP3-61	Revision 2 to the MP3 BTP 9.5-1 Compliance Report (Appendix R Safe Shutdown Compliance Report)	S3-EV-98-0022

Description of Change

The Millstone Unit No. 3 Final Safety Analysis Report (FSAR) was revised to bring the FSAR into conformance with Revision 2 of the Unit No. 3 Branch Technical Position 9.5-1 Compliance Report (Appendix R Safe Shutdown Compliance Report).

Reason for the Change

This change was made to correct an inaccuracy in the FSAR.

Safety Evaluation Summary

This change is a document change only and has no effect on the operation or configuration of any plant system. This activity does not increase the probability of occurrence of a malfunction of equipment important to safety previously evaluated in the Safety Analysis Report (SAR), does not increase the consequence of a malfunction of equipment important to safety previously evaluated in the SAR, and does not create the possibility of a malfunction of a different type than any previously evaluated in the SAR. This activity does not represent an Unreviewed Safety Question and is safe.

Docket Nos. 50-336
50-423
B18156

Enclosure 3

Millstone Nuclear Power Station, Unit Nos. 2 and 3

Commitment Change Annual Report for 1999

Millstone Nuclear Power Station

Unit Nos. 2 and 3

Commitment Change Annual Report

January 1, 1999, through December 31, 1999

COMMITMENT CHANGES

Commitment Number *	Original Commitment	Revised Commitment	Remarks
A06444-01	Perform full exercise of Millstone Unit No. 2 Pressure Isolation Valve (PIV) check valves 2-SI-215/225/235/245, 2-SI-217/227/237/247 and 2-SI-706A/B/C/D each refueling outage to ensure operability.	Perform full exercise closed of check valves 2-SI-215/225/235/245, 2-SI-217/227/237/247 and 2-SI-706A/B/C/D at least once every 6 years by sample disassembly and inspection in accordance with Generic Letter (GL) 89-04, position 2. Non-intrusive test methods may be used in place of sample disassembly and inspection where practical.	This is based on recommendations from resolution of NRC Generic Issue 105, "ISLOCA in Light Water Reactors," and the results of the Millstone Unit No. 2 ISLOCA review as part of infrequently performed test evolution process.
A06444-02	Perform leak test of 2-SI-652 in accordance with Appendix J each refuel outage.	Perform leak test of PIV/Containment Isolation Valve (CIV) 2-SI-651 at least once every 5 years in accordance with Appendix J, Option B.	The source document contained error of mistakenly identifying 2-SI-652, which is not tested per Appendix J, instead of 2-SI-651.
B15468-01	Specifically, Northeast Nuclear Energy Company's (NNECO's) commitment is that Operations Department personnel will verify correct implementation of equipment control measures such as tagging of equipment. This practice satisfies the intent of TMI Action Plan Item I.C.6 and has been incorporated into the current revision of WC-2.	Except in cases of significant radiation exposure, a second qualified person will verify correct implementation of equipment control measures such as tagging of equipment. Any operator possessing knowledge of the plant systems involved and their relationship to plant safety, or other authorized person specifically trained and qualified for independent component position verification and second checking tags, is a qualified person for purposes of this commitment.	This changes the equipment control measures verifier (performing second checks of tags) from "a qualified operator" to "a qualified person." This is consistent with the original NUREG-07037, Item I.c.6, requirement and later NRC positions which have accepted non-licensed personnel as qualified to verify tagouts.
B16811-18	Formally train all applicable Nuclear Training Department (NTD) and line personnel performing training assessment.	Cancel this commitment.	There is now a site-wide procedure on how to perform self-assessment. Self-assessment has become a process that is part of everyday life at Millstone. There is no longer a need for formal training due to the culture change.

COMMITMENT CHANGES

Commitment Number*	Original Commitment	Revised Commitment	Remarks
B15223-5	<p>Personnel who perform the duties of a Unit Duty Officer will be subject to the following qualifications and training.</p> <p>Qualifications:</p> <ol style="list-style-type: none"> 1. Holds a current Senior Reactor Operator (SRO) license or possesses equivalent knowledge of the unit. 2. Demonstrates a high degree of plant expertise and professional competence to plant management. <p>Training:</p> <ol style="list-style-type: none"> 1. Completes annual training for Manager of Technical Support. 2. Most [must] complete annual training for On-site Director of Site Emergency Organization (ODSEO). 3. Participates as controllers or players in the site's Emergency Plan drills and exercise. (Players are determined by the individuals scheduled on-call for the drill dates and controllers are volunteers.) 4. Completes event classification training with Emergency Action Level Tables (handout exercises quarterly and classroom session yearly). 5. Holders of an SRO license complete all Licensed Operator Re-qualification Training requirements. <p>NOTE: The ODSEO position has been staffed since January 1992, but is under review for deletion in 1995. The training from the ODSEO program that is relevant to Duty officers will be included in the duty officer training program.</p>	<p>Personnel who perform the duties of a Unit Duty Officer will hold a Senior Reactor Operator (SRO) license or possess equivalent knowledge and will review unit-specific Millstone Point Technical Specifications (TS), 10CFR21 implementation procedure, Corrective Action Program procedure, Emergency Notification and Communication procedure and 10CFR50.9(b), 10CFR50.72 and 10CFR50.73 reporting procedure. Completion of qualifications will be documented and demonstrated to plant management.</p>	<p>Revised commitment continues to maintain the level of plant knowledge and experience necessary for Duty Officers to provide supervisory oversight. Completion of qualifications will be documented and demonstrated to plant management.</p>

COMMITMENT CHANGES

Commitment Number*	Original Commitment	Revised Commitment	Remarks
A04126-04	<p>The licensee methodology relates post-accident core damage with measurements of radio-nuclide concentrations in the reactor coolant and containment atmosphere and with other plant indicators. A realistic differentiation between four major fuel conditions (no damage, cladding failure, fuel overheating, and core melt) can be assessed by qualified personnel. Fission product isotopes which can characterize the extent of core damage and which can be effectively measured are identified. The licensee has committed in the next revision of the procedure to utilize specific ratios of selected nuclides to indicate whether the activity is released from the gap or from fuel overheating/melt. The radio-nuclide measurements, used in conjunction with other plant indicators of core exit thermocouple temperatures, pressure vessel water level, containment radiation monitors, and hydrogen production from metal/water reaction, are used to develop an estimate of the type and extent of core damage. An inline hydrogen analyzer is provided for the reactor containment to determine hydrogen concentrations in the containment atmosphere. Reactor coolant total dissolved gases in pH can be determined with inline monitors. Reactor coolant boron, radionuclide gamma spectrum, and gross radioactivity are determined by laboratory analyses on small grab samples obtained via septum and syringe. The chloride content in post accident reactor coolant is done by poloraphic analyzer. We find that the licensee meets Criterion (2) by establishing an onsite radiological and chemical analysis capability and an acceptable methodology for estimating core damage</p>	<p>The licensee methodology relates post-accident core damage with measurements of radio-nuclide concentrations in the reactor coolant and containment atmosphere and with other plant indicators. A realistic differentiation between four major fuel conditions (no damage, cladding failure, fuel overheating, and core melt) can be assessed by qualified personnel. Fission product isotopes which can characterize the extent of core damage and which can be effectively measured are identified. The licensee has committed in the next revision of the procedure to utilize specific ratios of selected nuclides to indicate whether the activity is released from the gap or from fuel overheating/melt. The radio-nuclide measurements, used in conjunction with other plant indicators of core exit thermocouple temperatures, pressure vessel water level, containment radiation monitors, and hydrogen production from metal/water reaction, are used to develop an estimate of the type and extent of core damage. An inline hydrogen analyzer is provided for the reactor containment to determine hydrogen concentrations in the containment atmosphere. Reactor coolant total dissolved gases in pH can be determined with inline monitors. Reactor coolant boron, radionuclide gamma spectrum, and gross radioactivity are determined by laboratory analyses on small grab samples obtained via septum and syringe. The chloride content in post accident reactor coolant is done by ion chromatography. We find that the licensee meets Criterion (2) by establishing an onsite radiological and chemical analysis capability and an acceptable methodology for estimating core damage.</p>	<p>The chloride content in post accident reactor coolant is now done by ion chromatography. Chemistry Laboratory analytical equipment has been upgraded and analytical methods have been improved. The revised analytical capabilities meet or exceed the post-accident sampling criteria reviewed and approved in the NRC Safety Evaluation Report (SER).</p> <p>Note: Letter B17706, submitted to the NRC 3/23/99, eliminated measurement of all dissolved gas committed to in letter dated November 1, 1982.</p>

*See References for letter information.

COMMITMENT CHANGES

Commitment Number*	Original Commitment	Revised Commitment	Remarks
A04126-10	A polographic analyzer is utilized for reactor coolant chloride content down to 0.1 ppm. Criterion (5) [re: chloride analysis] is met by the licensee by having the capability to perform the chloride analysis on undiluted samples and therefore, is acceptable.	Ion chromatography is utilized for measuring reactor coolant chloride content down to 0.1 ppm. Criterion (5) [re: chloride analysis] is met by the licensee by having the capability to perform the chloride analysis on undiluted samples and therefore, is acceptable.	Chemistry Laboratory analytical equipment has been upgraded and analytical methods have been improved. The revised analytical capabilities meet or exceed the post-accident sampling criteria reviewed and approved in the NRC Safety Evaluation Report (SER).
2/28/77	Northeast Nuclear Energy Company hereby submits the attached report entitled "Fire Protection Program Review - BTP APCSB 9.5-1 - Millstone Unit No. 2." The evaluation and presentation of results are in conformance with the NRC document entitled "Supplementary Guidance on Information Needed for Fire Protection Program Evaluation."	<p>Northeast Nuclear Energy Company hereby submits the attached report entitled "Fire Protection Program Review - BTP APCSB 9.5-1 - Millstone Unit No. 2." The evaluation and presentation of results are in conformance with the NRC document entitled "Supplementary Guidance on Information Needed for Fire Protection Program Evaluation."</p> <p>The fire water supply is calculated on the basis of the largest expected flow rate for a period of two hours. This flow rate is based (conservatively) on 500 gpm for manual hose streams plus the largest design demand of any sprinkler or deluge system.</p>	The revised requirement is consistent with later NRC fire protection requirements (e.g. NUREG-0800-BTP CMEB 9.5-1, Section 6.b.(11)). Note: The revised requirement is also consistent with current insurer and NFPA requirements.

*See References for letter information.

COMMITMENT CHANGES

Commitment Number*	Original Commitment	Revised Commitment	Remarks
B13805-03	<p>As a result of these discussions, Connecticut Yankee Atomic Power Company (CYAPCO) and NNECO will revise their present vendor interface program to contact vendors of key safety-related components outside the Nuclear Steam Supply System (NSSS) scope of supply of a nominally annual basis. Each of the operating units will identify a list of key safety-related components (e.g., emergency diesel generators, major Emergency Core Cooling System (ECCS) components, etc.). The vendor for each listed safety-related component will be contacted on a nominally annual basis, and their responses formally reviewed for any technical information relevant to the listed equipment and its operation. This program will be implemented and the lists (plant specific) of key components will be completed by October 1, 1991.</p>	<p>As a result of these discussions, CYAPCO and NNECO will revise their present vendor interface program to contact vendors of key safety-related components outside the Nuclear Steam Supply System (NSSS) scope of supply of a nominally annual basis. Each of the operating units will identify a list of key safety-related components (e.g., emergency diesel generators, major Emergency Core Cooling System (ECCS) components, etc.). The vendor for each listed safety-related component will be contacted on a tri-annual basis, and their responses formally reviewed for any technical information relevant to the listed equipment and its operation. This program will be implemented and the lists (plant specific) of key components will be completed by October 1, 1991.</p>	<p>Revise vendor re-contact requirement for Millstone Unit No. 2 from a nominally annual basis to a once every three years basis beginning in 1999. The vendor for each listed safety-related component will be contacted on a once every three years basis beginning in 1999. We are participating in a Centralized Vendor Re-contact program with other Utilities. Real time experience in the industry indicates that a three year cycle is optimum.</p>

COMMITMENT CHANGES

Commitment Number*	Original Commitment	Revised Commitment	Remarks
B17570-01	The design will be reviewed to assure that undetected failures of this type (degraded output) are accounted for in the analysis of the Reactor Trip System.	No change in commitment. Due date change only. Due date changed from 2/28/99 to 3/31/99.	Additional time needed to provide a thorough evaluation of the Reactor Protection System analyses and design.
B17038-03	All operator manipulated valves contained in Wave 1, 2, and 3 systems will be re-labeled, if required, with component labels which include the component identification number, noun name description and the label is bordered with a distinct system color code. In addition to the designated systems in WAVE 1, 2, and 3, twenty-three other systems will be completed prior to Mode 4. The other twenty-three systems are part of the activities selected by Design Engineering for configuration control walkdown during this outage to ensure that configuration control deficiencies are identified and corrected. Valves identified during 10CFR50.54(f) which require operator manipulation will also be verified for correct labeling. Remaining system valve labeling will be completed by 7-1-99.	System valve labeling will be upgraded and maintained, in accordance with OA-9 System and Component Labeling. Due: Complete as of the effective date of the new procedure OA 9, System and Component Labeling. March 20, 1998.	The valves identified have been labeled with bar-coded labels which include the component identification number, noun name description and label bordered with a distinct system color code in accordance with OA-9. With OA-9 in place continuous improvement and upkeep of our labeling will continue as resources and operationally focused priorities dictate.
B17491-09	Corrective actions will require the issuance of a Design Change Notice (DCN) to resolve the separation deficiencies between trays Z12AA20 and Z24LA60 and Z24LA57 and Z16HT35.	Corrective actions will include engineering evaluation of design requirements and issuance of appropriate design documentation, if necessary, to resolve the separation deficiencies between trays Z12AA20 and Z24LA60 and Z24LA57 and Z16HT35.	An evaluation was performed to identify cable separation deficiencies in areas of Millstone Unit No. 2 that have previously been identified and discussed with the NRC, during both NRC Staff reviews and in NRC Resident Inspector reports.
A04910-04	The Millstone Unit No.3 Periodic Maintenance (PM) program will include the above stated fourteen items at the specified intervals. Maintenance Procedure (MP) 3786AH "PM Procedure Reactor Trip Breakers" has been drafted in accordance with the criteria of Westinghouse Maintenance Manual for the DS-416 Reactor Trip Breakers, Revision 0. Oct. 1984.	The Millstone Unit No. 3 Periodic Maintenance (PM) program will include the above stated fourteen items at the specified intervals (or when 500 breaker operations have been counted, whichever comes first). Maintenance Procedure (MP) 3786AH "PM Procedure Reactor Trip Breakers" has been drafted in accordance with the criteria of the current vendor maintenance manual for the DS-416 Reactor Trip Breakers.	The current Westinghouse DS-416 circuit breaker manual recommends these maintenance activities be performed on a 500 opening/closing cycle interval not to exceed 24 months.

*See References for letter information.

COMMITMENT CHANGES

Commitment Number*	Original Commitment	Revised Commitment	Remarks
B14805-18	Millstone Unit No. 2 I&C Department and Nuclear Training Department have initiated actions to improve the On The Job Training (OJT) program and to complete the qualification requirements for the majority of the technicians and procedures.	Millstone Unit No.2 I&C Department has initiated actions to clarify the requirements for a "pre-job briefing", a "procedure review" and "increased supervision" in it's department certification procedure (IC2450), as well as to increase the number of OJT qualified technicians.	This was reworded so that the commitment accurately reflects the actions taken.
B17505-06	Deficiencies in In Service Test (IST) documentation which were identified under the 50.54(f) review will be incorporated into the IST Program Plan, Bases Document and Implementing Procedures to ensure compliance with 10CFR50.55a. Deficient IST Program surveillance procedures will be revised. These activities will be completed prior to entry into Mode 4 from the current outage.	Deficiencies in IST documentation which were identified under the 50.54(f) review will be incorporated into the IST Program Plan, Bases Document and Implementing Procedures to ensure compliance with 10 CFR 50.55a. Deficient IST Program surveillance procedures will be revised. All Deficient IST Program surveillance procedures required for startup will be revised prior to entry into Mode 4 from the current outage.	All procedure revisions identified in the 50.54(f) review required for startup have been completed. Four deficiencies from the review were determined to be deferrable until after startup as stated in Memo TS2-99-47.
B16996-21	The hydrogen monitoring system is being replaced with a system that will function in accordance with the licensing basis. The new monitors will be capable of functioning during the accident scenarios postulated within the Millstone Unit No. 2 design basis.	No change in commitment. Due date change only. Due date changed from prior to entry into Mode 4 to prior to entry into Mode 2.	Technical Specifications Section 3.6.4.1 for Combustible Gas Control, Hydrogen Monitor, states that two independent containment hydrogen monitors shall be operable in Modes 1 and 2. Therefore, the hydrogen monitors are not required until entry into Mode 2.
B16996-24	The new hydrogen monitor configuration will ensure that the Post Accident Sampling System (PASS) will also meet the design basis requirements, since the PASS utilizes the hydrogen monitor to provide its motive force. Configuration of the PASS has been designed such that it will not interrupt the hydrogen monitor flow path.	No change in commitment. Due date change only. Due date changed from prior to entry into Mode 4 to prior to entry into Mode 2.	The replacement hydrogen monitoring system includes provisions for PASS. Neither the PASS nor the hydrogen monitoring system is required prior to entry into Mode 2.
B16996-191	Work on the remaining open items from the Engineering Self-Assessment Report is in progress and will be completed prior to entry into mode 4 from the current outage.	No change in commitment. Due date change only. Due date changed from prior to entry into mode 4 to prior to entry into mode 3.	During a Millstone Unit No. 2 Station Blackout (SBO) event Millstone Unit No. 2 must achieve and maintain a Hot Standby condition (Mode 3), ref. SP-EE-362 Rev. 1. Entry into Mode 4 will not be prevented by the SBO issues identified in Millstone Unit No. 2 SBO Program PI-21 ESAR-PRGM-97-028 Rev. 0 that are still open.

*See References for letter information.

COMMITMENT CHANGES

Commitment Number*	Original Commitment	Revised Commitment	Remarks
B16639-01	The applicable emergency operating procedures (EOPs) will be revised prior to entry into Mode 4 from the current outage to determine appropriate action to remotely isolate the hotwell make-up valve if it fails to close in response to a low-level alarm.	No change in commitment. Due date change only. Due date changed from prior to entry into Mode 4 to prior into entry Mode 3.	Millstone Unit No. 2 EOPs are not valid until Mode 3 and subsequently not required for Mode 4.
B17191-01	As a result of this event, procedure revisions will be implemented, prior to Mode 4 from the present outage to ensure that upon loss of the associated Service Water pump, Service Water is restored or the Reactor Building Closed Cooling Water Pump is shutdown.	No change in commitment. Due date change only. Due date changed from prior to entry into Mode 4 to prior into entry Mode 3.	Millstone Unit No. 2 EOPs are not valid until Mode 3 and subsequently not required for Mode 4.
B16993-01	The identified design deficiencies will be evaluated and appropriate corrective actions determined. These corrective actions will be completed prior to entry into Mode 4 from the current outage.	The identified design deficiencies will be evaluated and appropriate corrective actions determined. These corrective actions will be completed prior to entry into Mode 3 from the current outage.	Due date change.
A08201-93	The Northeast Utilities (NU) Training Manual requires that items which could alter an individual's job scope be evaluated to determine if formal training is necessary to support the change. Training modifications to support procedure revisions or plant design changes related to NRC GL 89-13, Service Water System Issues, will be made using this process.	Cancel this commitment.	When written, there was no regulatory requirement for a "performance based" training program. Since Nov. 22, 1993, training has been governed by 10CFR50.120, "Training and Qualification of Nuclear Power Plant Personnel," which requires that the program be "performance based" in accordance with a Systems Approach to Training (SAT). The current training programs are SAT based and are accredited through the Institute of Nuclear Power Operations. The activities described in this commitment are governed by both 10CFR50.120 and the accreditation process (specifically the analysis and evaluation phases of SAT). Therefore, this commitment may be cancelled.

COMMITMENT CHANGES

Commitment Number*	Original Commitment	Revised Commitment	Remarks
B13137-31	Also, training modifications to support any procedure revisions or plant design changes related to NRC GL 89-14 issues will be made using this process.	Cancel this commitment.	When written, there was no regulatory requirement for a "performance based" training program. Since Nov. 22, 1993, training has been governed by 10CFR50.120 which requires that the program be "performance based" in accordance with a SAT. The current training programs are SAT based and are accredited through the Institute of Nuclear Power Operations. The activities describe in this commitment are governed by both 10CFR50.120 and the accreditation process (specifically the analysis and evaluation phases of SAT). Therefore, this commitment may be cancelled.
A07623-29	This process was used to make permanent content modifications to standing program lessons of all disciplines as well as provide input for continuing training programs on shutdown cooling topics. Also, training modifications to support procedure revisions or plant design changes related to NRC GL 88-17 shutdown cooling issues will be made using this process.	Cancel this commitment.	When written, there was no regulatory requirement for a "performance based" training program. Since Nov. 22, 1993, training has been governed by 10CFR50.120 which requires that the program be "performance based" in accordance with a SAT. The current training programs are SAT based and are accredited through the Institute of Nuclear Power Operations. The activities describe in this commitment are governed by both 10CFR50.120 and the accreditation process (specifically the analysis and evaluation phases of SAT). Therefore, this commitment may be cancelled.
B13137-26	This process was used to make permanent content modifications to standing program lessons of all relevant disciplines as well as to provide input for continuing training programs on instrument air system topics.	Cancel this commitment.	When written, there was no regulatory requirement for a "performance based" training program. Since Nov. 22, 1993, training has been governed by 10CFR50.120 which requires that the program be "performance based" in accordance with a SAT. The current training programs are SAT based and are accredited through the Institute of Nuclear Power Operations. The activities describe in this commitment are governed by both 10CFR50.120 and the accreditation process (specifically the analysis and evaluation phases of SAT). Therefore, this commitment may be cancelled.

*See References for letter information.

COMMITMENT CHANGES

Commitment Number	Original Commitment	Revised Commitment	Remarks
B13137-27	Also, training modifications to support procedure revisions or plant design changes related to NRC GL 88-14 issues will be made using this process.	Cancel this commitment.	When written, there was no regulatory requirement for a "performance based" training program. Since Nov. 22, 1993, training has been governed by 10CFR50.120 which requires that the program be "performance based" in accordance with a SAT. The current training programs are SAT based and are accredited through the Institute of Nuclear Power Operations. The activities describe in this commitment are governed by both 10CFR50.120 and the accreditation process (specifically the analysis and evaluation phases of SAT). Therefore, this commitment may be cancelled.
12/31/79	Via participation in the Combustion Engineering (CE) Owners Group, NNECO has reviewed events which have the potential for causing inadequate core cooling. The results of this review have been documented to the Staff in response to I&E Bulletin No. 79-06C, Item 5. The CE Owners Group has determined that sufficient information from existing instrumentation indeed exists to detect the existence of inadequate core cooling, as additional procedural guidance has been developed by the Owners Group. NNECO has updated emergency procedures and associated operator training based upon these guidelines	Via participation in the CE Owners Group, NNECO has reviewed events which have the potential for causing inadequate core cooling. The results of this review have been documented to the Staff in response to I&E Bulletin No. 79-06C, Item 5. The CE Owners Group has determined that sufficient information from existing instrumentation indeed exists to detect the existence of inadequate core cooling, as additional procedural guidance has been developed by the Owners Group. NNECO has updated emergency procedures.	This change eliminates the operator training portion of this commitment which is superseded by the current version of the Millstone Unit No. 2 Final Safety Analysis Report (FSAR).

COMMITMENT CHANGES

Commitment Number*	Original Commitment	Revised Commitment	Remarks
A02959-01	<p>All items included in Phase I will be fully operable (including operator training, procedures, and a users manual) by fuel load and represent a functional safety functional display system (SPDS). The following SPDS features will exist at the completion of Phase I (the page where each item appears in our Safety Analysis Report [SAR] is provided in the parentheses):</p> <ul style="list-style-type: none"> Inadequate core cooling displays (pg. 1-3) Core map of core exit thermocouples (pg. 1-3) Pressure/temperature plots (pg. 1-4) Subcooling and superheat displays (pg. 1-4) 99% design availability (pg. 2-1) Pre and post event historical data storage (pg. 2-2) Historical data access (printed output only) (pg. 2-2) Display of critical safety function variables (pg. 3-3) Critical safety function status blocks (pg. 4-1) Critical safety function status trees (pg. 4-1) Sensor signal validation of physically redundant sensors (pg. 5-1) Verification and validation (pg. 6-1) Human factors review of displays and man-machine interface (pg. 7-1) 	<p>All items included in Phase I will be fully operable (including procedures, and a users manual) by fuel load and represent a functional SPDS. The following SPDS features will exist at the completion of Phase I (the page where each item appears in our SAR is provided in the parentheses):</p> <ul style="list-style-type: none"> Inadequate core cooling displays (pg. 1-3) Core map of core exit thermocouples (pg. 1-3) Pressure/temperature plots (pg. 1-4) Subcooling and superheat displays (pg. 1-4) 99% design availability (pg. 2-1) Pre and post event historical data storage (pg. 2-2) Historical data access (printed output only) (pg. 2-2) Display of critical safety function variables (pg. 3-3) Critical safety function status blocks (pg. 4-1) Critical safety function status trees (pg. 4-1) Sensor signal validation of physically redundant sensors (pg. 5-1) Verification and validation (pg. 6-1) Human factors review of displays and man-machine interface (pg. 7-1) 	<p>This change eliminates the operator training portion of this commitment which is superseded by the current version of the Millstone Unit No. 3 FSAR.</p>
A02959-02	<p>The following features will be implemented during Phase II and will be fully operable (including operator training and revised or new procedures and users manual) prior to startup from the first refueling outage. (the page where each item appears in our SAR is provided in the parentheses):</p> <ul style="list-style-type: none"> Inference of a third channel using analytic redundancy, if necessary (pg. 1-3) Time history plots of inadequate core cooling variables (pg. 1-4) Horizontal or vertical bar graphs, if necessary (pg. 2-2) Mimic/P&ID displays (pg. 2-2) Multivariable plots vs. time (pg. 2-2) Variable vs. variable plots (pg. 2-2) Plant variable information to aid critical safety function assessment and execution of emergency operating procedures, if necessary (pg. 4-2) 	<p>The following features will be implemented during Phase II and will be fully operable (including revised or new procedures and users manual) prior to startup from the first refueling outage. (the page where each item appears in our SAR is provided in the parentheses):</p> <ul style="list-style-type: none"> Inference of a third channel using analytic redundancy, if necessary (pg. 1-3) Time history plots of inadequate core cooling variables (pg. 1-4) Horizontal or vertical bar graphs, if necessary (pg. 2-2) Mimic/P&ID displays (pg. 2-2) Multivariable plots vs. time (pg. 2-2) Variable vs. variable plots (pg. 2-2) Plant variable information to aid critical safety function assessment and execution of emergency operating procedures, if necessary (pg. 4-2) 	<p>This change eliminates the operator training portion of this commitment which is superseded by the current version of the Millstone Unit No. 3 FSAR.</p>

*See References for letter information.

COMMITMENT CHANGES

Commitment Number*	Original Commitment	Revised Commitment	Remarks
A01379-55	The guidance provided by the INPO programs will be incorporated as applicable into the appropriated Millstone lesson plans by April 1, 1981.	Cancel this commitment.	When this was initiated, regulatory guidance on "performance based" training did not exist. Currently, 10CFR55 and 10CFR50.120 allow training content to be determined using a SAT. Millstone has committed to exercising this option by maintaining INPO accredited programs to the accreditation objectives set forth in ACAD 91-015, which addresses the use of INPO guidelines to determine training content (Criteria 1.1). This is documented in Section 12.2 of the Millstone Unit No. 2 FSAR.
A01379-04	Operator training programs have been initiated to provide the operator with a more comprehensive understanding of plant operation under emergency conditions.	Cancel this commitment.	When this was initiated, regulatory guidance on "performance based" training did not exist. Currently, 10CFR55 and 10CFR50.120 allow training content to be determined using a SAT. Millstone has committed to exercising this option by maintaining INPO accredited programs to the accreditation objectives set forth in ACAD 91-015, which addresses the use of INPO guidelines to determine training content (Criteria 1.1). This is documented in Section 12.2 of the Millstone Unit No. 2 FSAR.
B11472-02	It is our objective that as our simulator training is expanded, additional simulator capabilities will be validated and made available for the conduct of operating exams. However, we feel that the simulator capabilities at this time are sufficiently broad and varied to provide an adequate base upon which to conduct the Millstone Unit No. 3 initial cold license exams.	Cancel this commitment.	The Millstone Unit No. 3 simulator is "certified" per the 10CFR55.45 requirement to have a "certified simulation facility" for NRC license examination use. Therefore, the fact that Millstone Unit No. 3 simulator provides an adequate base to conduct future NRC examinations is an obligation and no longer requires monitoring via an "active" commitment. Also, NU uses a SAT that meets the accreditation objectives set forth in ACAD 91-015 for training of licensed personnel. This is documented as licensing basis in Section 13.2 of the Millstone Unit No.3 FSAR.

*See References for letter information.

COMMITMENT CHANGES

Commitment Number*	Original Commitment	Revised Commitment	Remarks
A01685-07	Northeast Utilities Service Company personnel performing functions and duties relating to Millstone Unit No. 3 will be trained within the procedures of the affected departments. Retraining of personnel will be included as part of the overall program. Additional related information is presented in response to item D4 of Appendix B (from 4(C) and 4 (C)6.a).	Cancel this commitment.	The procedures referred to are Training Program Implementation Procedures (TPIPs). 10CFR55.59 allows Licensed Operator Re-qualification Training (LORT) content to be determined using a SAT. Millstone exercises SAT by maintaining INPO accredited LORT program to the accreditation objectives set forth in ACAD 91-015 as stated in the Millstone Unit No. 3 FSAR Section 13.2.
B14605-20	Operator training will be conducted to incorporate knowledge requirements associated with containment air sampling into the classroom portion of the Non-Licensed Operator Initial Training (NLIT) Auxiliary Building plant equipment operator (PEO) course. In addition, additional training on containment air sampling has also been included in the Non-Licensed Operator Continuing Training (NLCT) Auxiliary Building PEO course. This training is progress and will be completed in October 1993. Finally, in-plant walkthroughs will be performed as part of the next cycle of NLCT. This cycle of training will reemphasize which valves may be manipulated by chemistry and which valves may be manipulated by operations. This cycle of NLCT will be completed by January 1994.	Additional training on containment air sampling has also been included in the NLCT Auxiliary Building PEO course. This training is in progress and will be completed in Oct. 1993. Finally, in-plant walk through will be performed as part of the next cycle of NLCT. This cycle of training will reemphasize which valves may be manipulated by chemistry and which valves may be manipulated by operations. This cycle of NLCT will be completed by January 1994.	This eliminates the ongoing (ACTIVE) portion of this commitment which requires that PEO knowledge and skills be added to NLIT. Since this commitment was made, a Plant Design Change Record (PDCR) 2-154-92, installed quick disconnects that eliminated the need for valve manipulation for containment air sampling. Therefore, the specific content included to support this commitment is no longer valid.
A11271-20	Specific guidance regarding what to look for during the observation, and the frequency for conducting observations. (NOTE: The frequency may be put in performance-based or Prescriptive Terms.)	Specific guidance regarding what to look for during management observations and the frequency for conducting observations will be specified for LORT.	TPIPs have been replaced by Training Program Descriptions (TPDs). Also, the guidance of what to look for during the observations is included on the Management Observation of Training Form in NTP 151. This commitment change results in a more generic commitment.

*See References for letter information.

COMMITMENT CHANGES

Commitment Number*	Original Commitment	Revised Commitment	Remarks
A11271-19	LORT attendance will be tracked in matrix form (the matrices will be provided to each Unit Director and Operations Manager on a monthly basis) Closed based on OTBI-5, Training Program Monthly Status Report, Revision 1, Effective 7/1/93, which implements this Provision.	LORT attendance will be tracked.	OTBI 5 has been cancelled and this commitment will now be implemented via the LORT TPD. This commitment change results in a more generic commitment.

*See References for letter information.

COMMITMENT CHANGES

Commitment Number*	Original Commitment	Revised Commitment	Remarks
3/22/77	<p>The proper application of a procedure for performance of a specific task is monitored by the cognizant department supervisor. Examples are routine reviews of completed surveillance data, preventative maintenance data, procedure sequence checklists, and valve lineup sheets. Additionally, department supervisors routinely review all plant incident reports, work control authorization documents, (job orders, maintenance requests), and all log books. This review provides assurance that proper system tagout is accomplished, that prerequisites are met, and that procedures are followed.</p> <p>The retraining program for licensed personnel also includes provisions for evaluation of operations personnel during abnormal or transient conditions. A significant part of the evaluation is observation of compliance with procedures.</p> <p>Additionally the Quality Control (QC) department performs routine audits of system tagging, lifted wires/jumper installation, surveillance performance, and system retest performance. These audits document deficient items, which are dispositioned in a timely manner. This program is administered by Station Procedures 18.01 and 16.01.</p>	<p>The proper application of a procedure for performance of a specific task is monitored by the cognizant department supervisor. Examples are routine reviews of completed surveillance data, preventative maintenance data, procedure sequence checklists, and valve lineup sheets. Additionally, department supervisors routinely review all plant incident reports, work control authorization documents, (job orders, maintenance requests), and all log books. This review provides assurance that proper system tagout is accomplished, that prerequisites are met, and that procedures are followed.</p> <p>Additionally the QC department performs routine audits of system tagging, lifted wires/jumper installation, surveillance performance, and system retest performance. These audits document deficient items, which are dispositioned in a timely manner. This program is administered by Station Procedures 18.01 and 16.01.</p>	<p>This portion of the commitment is removed as it is superseded by the current version of the Millstone Unit No. 3 FSAR. When this commitment was initiated, regulatory guidance on "performance based" training did not exist. Currently, 10CFR55 allows licensed operator re-qualification training content to be determined using a systems approach for training (SAT). Millstone has committed to this approach.</p>

*See References for letter information.

COMMITMENT CHANGES

Commitment Number*	Original Commitment	Revised Commitment	Remarks
3/22/77	<p>The proper application of a procedure for performance of a specific task is monitored by the cognizant department supervisor. Examples are routine reviews of completed surveillance data, preventative maintenance data, procedure sequence checklists, and valve lineup sheets. Additionally, department supervisors routinely review all plant incident reports, work control authorization documents, (job orders, maintenance requests), and all log books. This review provides assurance that proper system tagout is accomplished, that prerequisites are met, and that procedures are followed.</p> <p>The retraining program for licensed personnel also includes provisions for evaluation of operations personnel during abnormal or transient conditions. A significant part of the evaluation is observation of compliance with procedures.</p> <p>Additionally the QC department performs routine audits of system tagging, lifted wires/jumper installation, surveillance performance, and system retest performance. These audits document deficient items, which are dispositioned in a timely manner. This program is administered by Station Procedures 18.01 and 16.01.</p>	<p>The proper application of a procedure for performance of a specific task is monitored by the cognizant department supervisor. Examples are routine reviews of completed surveillance data, preventative maintenance data, procedure sequence checklists, and valve lineup sheets. Additionally, department supervisors routinely review all plant incident reports, work control authorization documents, (job orders, maintenance requests), and all log books. This review provides assurance that proper system tagout is accomplished, that prerequisites are met, and that procedures are followed.</p> <p>Additionally the QC department performs routine audits of system tagging, lifted wires/jumper installation, surveillance performance, and system retest performance. These audits document deficient items, which are dispositioned in a timely manner. This program is administered by Station Procedures 18.01 and 16.01.</p>	<p>This portion of the commitment is removed as it is superseded by the current version of the Millstone Unit No. 2 FSAR. When this commitment was initiated, regulatory guidance on "performance based" training did not exist. Currently, 10CFR55 allows licensed operator re-qualification training content to be determined using a SAT. Millstone has committed to this approach.</p>

*See References for letter information.

COMMITMENT CHANGES

Commitment Number*	Original Commitment	Revised Commitment	Remarks
B13885-01	<p>The Millstone Unit No. 3 operator training programs currently contain practice in those actions necessary to maintain decay heat removal in the event of an SBO, as listed in the procedure EOP 35 ECA-0.0, "Loss of all AC Power." Modifications or enhancements to existing training will be conducted in coordination with pending equipment installation and procedure changes in accordance with NEO 3.03. These modification will be analyzed for training needs and the appropriate training methods will be employed to assure operator capabilities are adequate to control decay heat removal.</p>	<p>Cancel this commitment.</p>	<p>10CFR55 and 10CFR50.120 allow licensed and non-licensed operator initial and continuing (re-qualification) training content to be determined using an SAT. Millstone has committed to exercising this option by maintaining INPO accredited programs to the accreditation objectives set forth in ACAD 91-015. This is documented in Sect. 13.2 of the Millstone Unit No.3 FSAR. Millstone's SAT process is implemented through the Nuclear Training Procedures. As such, a Job and Task analysis is used to determine the initial and continuing training an operator needs to safely operate the plant. Also, plant modifications and procedures constitute feedback that drives program content changes, as required, using NTP 151. Therefore, this commitment should be cancelled.</p>
A05929-13	<p>The site Quality Assurance (QA)/QC Dept., through the use of QA surveillance (activity observation) and inspections, will monitor the processing, packaging and shipping of radioactive waste. At least once per month, periodic surveillance of the processing of radioactive waste including packaging and shipping will be performed. The packaging and shipping aspects will also be covered via inspection and hold points in the procedures and work orders. These programs are established, working and are conducted under the joint Corporate/Site audit program.</p>	<p>Cancel this commitment.</p>	<p>The Northeast Utilities Quality Assurance Topical Report states that portions of the Northeast Utilities Quality Assurance Program (NUQAP) are applied to Radwaste Quality Assurance. The NUQAP is maintained in compliance with appropriate regulations, RegGuides and industry standards. The program is evaluated by the NRC, INPO, and Self Assessment to ensure compliance. With the controls in place as defined above to insure compliance with the packaging and shipping regulations, this commitment serves no purpose going forward.</p>

*See References for letter information.

COMMITMENT CHANGES

Commitment Number*	Original Commitment	Revised Commitment	Remarks
9/17/79	All EOPs will be reviewed and revised, as necessary, to take into account level measurement errors resulting from reference leg heating, process variable change, to include flashing, and instrument error by January 18, 1980. In addition, all operators will have completed training on the revisions by the same date. The information presented in Attachment (2) will be used to revise post-accident monitoring level limits to envelop the most conservative conditions.	Cancel this commitment.	This commitment is covered by the training portion of B16226, which requires training on most current revision of EOPs prior to Millstone Unit No. 2 startup.

*See References for letter information.

COMMITMENT CHANGES

Commitment Number*	Original Commitment	Revised Commitment	Remarks
4/24/79	1. The actions requested by this item are complete as of today for the majority of operational personnel. Anyone who missed today's lectures will be individually trained prior to plant startup in May.	Cancel this commitment.	Training program content is driven by implementation of SAT Process.
B12491-04	In the Millstone Unit No. 2 License Operator TPIP Training Program Description (TPD), the annual and biennial control manipulation requirements are indicated using a single asterisk, or a double asterisk, respectively. The three control manipulations listed incorrectly are the result of typographical errors that were not identified during the review and approval process. This administrative oversight will be corrected by May 15, 1987 with the next revision to the Training Program Description.	Cancel this commitment.	Training program content is now driven by SAT process with content documents through the Licensed Operator task list.
B10937-01	After careful comparison of the available options, we determined that the best method of providing appropriate technical knowledge for shift personnel was through an arrangement with a local State technical college for a two-year, newly designed, Associate's Degree program in Nuclear Science Technology. Thames Valley State Technical College (TVSTC) was selected on the basis of an extensive comparative evaluation. Northeast Utilities and TVSTC jointly developed the curriculum and have received formal licensure for the program from the State of Connecticut. Presently, agreement has been reached on all other major issues and we are planning to offer the first program beginning December 5, 1983. The program offers the following attributes: [see document]	Cancel this commitment.	Current SAT based training programs provide necessary technical training content and prerequisites.

*See References for letter information.

COMMITMENT CHANGES

Commitment Number*	Original Commitment	Revised Commitment	Remarks
B14703-09	The process is being revised to require that Nonconformance Report (NCR) dispositions be reviewed by a Unit Engineering Manager to determine the need for a safety evaluation. The NCR procedure is in the process of being changed.	Nonconforming issues dispositioned with a Condition Report Engineering Disposition (CRED) will be screened for a Safety Evaluation in accordance with the requirements of the Corrective Action Program and Safety Evaluation Screens and Safety Evaluations process.	NCR was consolidated into RP-4 as a CRED. The two processes are equivalent. RP-4 requires a safety screening for nonconforming conditions dispositioned as "repair" and "Use-As-Is."
A11474-02	The licensee has previously been granted temporary relief to allow use of chlorobutyl rubber as an alternative structural material in expansion joints 3SWP*EJ6A through D in the Millstone Unit 3 SWS. Experience with this use has been satisfactory. The structural integrity of chlorobutyl rubber expansion joints placed in service will be monitored every 8 hours during appropriate plant walkdowns by plant operators.	The structural integrity of chlorobutyl rubber expansion joints placed in service will be monitored daily during appropriate plant walkdowns by plant operators.	The general area inspections performed under 3670.3 "Control Room and Plant Equipment Rounds" is credited with fulfilling this commitment. In addition, preventive maintenance work orders exist to replace the expansion joints prior to the end of service life.
B16996	The broad based corrective actions taken by NNECO will result in an overall upgrade in the management control system, the Corrective Action Program, engineering and design control process, and work control process. Improved management, technical personnel, programs, procedures and training will prevent recurrence of these types of violations.	The broad based corrective actions taken by NNECO will result in an overall upgrade in management control of the Corrective Action Program, engineering and design control process, and work control process. Improved management, technical personnel, programs, procedures and training will prevent recurrence of these types of violations.	As there was no program or commitments found that defined what a management control system was it has been determined that the intent of the original commitment was as stated in the revised commitment. The original commitment contained a typographical error and the purpose for this change is to better clarify the intent of the commitment.
B17551 (COMCR 3-99-124)	Revise the Loose Parts Monitoring Analog Channel Operational Test (ACOT) and Channel Calibration procedures to verify the range and accuracy of the setpoints. Due: Before the sixth refueling outage.	Revise the Loose Parts Monitoring Analog Channel Operational Test (ACOT) and Channel Calibration procedures to verify the range and accuracy of the setpoints, due date of "no later than 90 days after startup from RFO6, following completion of system testing at 100 percent power."	Due date change. Due date changed from before the sixth refueling outage to no later than 90 days after startup from RFO6, following completion of system testing at 100 percent power.
A07051-07	Millstone Unit No. 3 was granted a relief request, during the first 10 year IST interval, from the valve stroke time testing method, as defined in the ASME Section XI 1983 IWV Code.	Close this commitment.	Millstone Unit No. 3 is currently in the second 10 year IST interval and has submitted a new IST Program Plan for this period which began Feb. 8, 1998. The currently applicable Code does not require alert testing of valves and therefore, the second 10 year IST Plan has no similar relief request.

*See References for letter information.

COMMITMENT CHANGES

Commitment Number*	Original Commitment	Revised Commitment	Remarks
A04126-16	The PASS has the capability to obtain both undiluted and diluted reactor coolant grab sample and undiluted containment atmosphere grab samples. In addition, an inline chemical analyses panel is provided for measuring reactor coolant pH, total dissolved gas concentrations, as well as containment hydrogen concentrations. Also, a backup (diluted and undiluted) reactor grab sample can be obtained for the offsite analysis at the Haddam Neck Plant which has analysis capabilities similar to that of the licensee. We find that these provisions meet Criterion (8) and are, therefore, acceptable.	The PASS has the capability to obtain both undiluted and diluted reactor coolant grab sample and undiluted containment atmosphere grab samples. In addition, an inline chemical analyses panel is provided for measuring reactor coolant pH, total dissolved gas concentrations, as well as containment hydrogen concentrations. Also, a backup (diluted and undiluted) reactor grab sample can be obtained for offsite analysis to be performed at the Millstone Unit No. 3 chemistry laboratory which has analysis capabilities similar to that of the Millstone Unit No. 2. We find that these provisions meet Criterion (8) and are, therefore, acceptable.	The Haddam Neck Plant chemistry laboratory is no longer available to perform PASS sample analysis. The revised backup facility (Millstone Unit No. 3) analytical capabilities meet or exceed the post-accident backup sampling criteria reviewed and approved in the NRC SER.
6/13/95	A surveillance procedure will be written to flush the Recirculation Spray System (RSS) heat exchangers at specific times during the year to minimize the vulnerability from plantgrade attachment.	Flush and visually inspect Containment Recirculation Heat Exchangers 3RSS*E1A/B/C/D twice per year.	Piping is mostly copper nickel and is not conductive to bio-fouling growth. Since inception of the flush and inspect procedure results have been positive with no notable amounts of foreign material having been found.
B17736-02	Develop either an inter-relating general operating procedure or revise existing plant operating procedures to assure compliance with TS Surveillance Requirement 4/7/2/1 criteria.	No change in commitment. Due date change only. Due date changed from 8/31/99 to 9/30/99.	It has been determined that completion of an effective review and implementation process cannot be accomplished by the original due date.
B16996-351	The current Proposed Technical Specification Change Request (PTSCR) procedure requires that a 10CFR50.59 safety evaluation be prepared for all PTSCRs. Nuclear Group Procedure (NGP) 5.31, "Engineering Record Correspondence and Technical Evaluations," has been revised to include a process for the development and control of engineering records of correspondence (ERCs) and technical evaluations (TEs). This procedure now includes requirements for uniquely identifying ERCs and TEs and forwarding them to Nuclear Document Services (NDS). (04113).	Procedure NGP 5.31, "Engineering Record Correspondence and Technical Evaluations," has been revised to include a process for the development and control of engineering records of correspondence (ERCs) and technical evaluations. This procedure now includes requirements for uniquely identifying ERCs and TEs and forwarding them to NDS. (04113).	Performing 10CFR50.59 safety evaluations for PTSCRs was never intended to be a commitment or a corrective action in response to the NOV referenced in letter B16996.

*See References for letter information.

COMMITMENT CHANGES

Commitment Number*	Original Commitment	Revised Commitment	Remarks
B16113-02	A design change to simplify maintenance activities will be implemented during the next refueling outage, Refueling Outage (RFO)13.	A design change to simplify maintenance activities will be implemented during the next refueling outage in which Engineered Safeguards Actuation System (ESAS) actuation cabinets 5 & 6 are downpowered. Due date: 2R14.	The design change to facilitate downpowering the ESAS actuation cabinets requires that the cabinets be downpowered to install the change. It is prudent to install this change during a scheduled downpower, 2R14.
B17810-02	The appropriate torquing procedure will be revised by Sept. 30, 1999, to incorporate changes as necessary to clarify the use of the procedure when significant dynamic piping loads are expected from events such as water hammers or the opening of pressure relief valves.	The appropriate torquing procedure will be revised by Nov. 30, 1999, to incorporate changes as necessary to clarify the use of the procedure when significant dynamic piping loads are expected from events such as water hammers or the opening of pressure relief valves.	Due date change. The proposed changes are guidance only (not intent changes), and use of this procedure is not anticipated prior to revised completion date.
B17810-02	The appropriate torquing procedure will be revised by Nov. 30, 1999, to incorporate changes as necessary to clarify the use of the procedure when significant dynamic piping loads are expected from events such as water hammers or the opening of pressure relief valves.	The appropriate torquing procedure will be revised to incorporate changes as necessary to clarify the use of the procedure when significant dynamic piping loads are expected from events such as water hammers or the opening of pressure relief valves. Due date: 2/29/00	Due date change. Additional time is required to resolve differences between engineering memo and Condition Report.

*See References for letter information.

REFERENCES *

A06444	NU letter dated July 14, 1987 E. J. Mroczka to NRC	Millstone Nuclear Power Station, Unit No. 2, Generic Letter 87-06 Periodic Verification of Leak Tight Integrity of Pressure Isolation Valves
A06444	NU letter dated July 14, 1987 E. J. Mroczka to NRC	Millstone Nuclear Power Station, Unit No. 2, Generic Letter 87-06 Periodic Verification of Leak Tight Integrity of Pressure Isolation Valves
B15468	NU letter dated December 4, 1995 E. A. DeBarba to NRC	Millstone Nuclear Power Station, Unit Nos. 1 and 2, Station Tagging
B16811	NNECO letter dated November 14, 1997 D. B. Amerine to NRC	Millstone Nuclear Power Station, Units 1, 2, and 3, Revision to Corrective Action Plan For Training
B15223	NU letter dated November 13, 1995 J. F. Opeka to NRC	Millstone Nuclear Power Station, Unit Nos. 1 and 3, Pilot Program Summary Report, NEI Guidelines for Managing NRC Commitments
A04126	NRC letter dated June 14, 1984 J. R. Miller to W. G. Council	NUREG-0737 ITEM II.B.3 - Evaluation of Post-Accident Sampling Capabilities
A04126	NRC letter dated June 14, 1984 J. R. Miller to W. G. Council	NUREG-0737 ITEM II.B.3 - Evaluation of Post-Accident Sampling Capabilities
2/28/77	NNECO letter dated February 28, 1977 D. C. Switzer to G. Lear	Millstone Nuclear Power Station Unit No. 2, Evaluation of Standard Review Plan 9.5.1
B13805	NU letter dated April 19, 1991 E. Z. Mroczka to NRC	Haddam Neck Plant, Millstone Nuclear Power Station, Unit Nos. 1, 2, and 3, Response to Generic Letter 90-03, Vendor Interface for Safety-Related Components
B17570	NNECO letter dated February 3, 1999 C. J. Schwarz to NRC	Licensee Event Report 98-041-01, "Failure to Enter Action Statement For Inoperable SG Water Level Channel In Accordance With Technical Specifications"
B17038	NNECO letter dated June 30, 1998 M. L. Bowling, Jr. to NRC	Millstone Nuclear Power Station Unit No. 3, Annual Report of Revised Regulatory Commitments
B17491	NNECO letter dated November 9, 1998 M.L. Bowling, Jr. To NRC	Millstone Nuclear Power Station Unit No. 2, Revised Reply to a Notice of Violation, Safety System Functional Inspection, NRC Inspection Report 50-336/98-202
A04910	NU letter dated September 5, 1985 J. F. Opeka to B. J. Youngblood	Millstone Nuclear Power Station Unit No. 3, Response to Request for Additional Information , Generic Letter 83-28, Generic Implication of Salem ATWS Events
B14805	NU letter dated April 15, 1994 J. F. Opeka to NRC	Millstone Nuclear Power Station, Unit Nos. 1 and 2, Reply to Notices of Violation, Inspection Report Nos. 50-245/93-32; 50-336/93-28; 50-423/93-29
B17505	NNECO letter dated December 7, 1998 J. A. Price to NRC	Millstone Nuclear Power Station, Unit No. 2, Licensee Event Report 96-030-02, In-Service Test Program Deficiencies
B16996	NNECO letter dated March 2, 1998 M. L. Bowling, Jr. to Director, Office of Enforcement	Millstone Nuclear Power Station, Unit Nos. 1, 2 and 3, Reply to a Notice of Violation and Proposed Imposition of Civil Penalties, (NRC Inspection Report Nos. 50-245/50-336/50-423: 95-44; 95-82; 96-01; 96-03; 96-04; 96-05; 96-06; 96-08; 96-09; 96-201)

*Reference order corresponds to Commitment Changes.

REFERENCES *

B16996	NNECO letter dated March 2, 1998 M. L. Bowling, Jr. to Director, Office of Enforcement	Millstone Nuclear Power Station, Unit Nos. 1, 2 and 3, Reply to a Notice of Violation and Proposed Imposition of Civil Penalties, (NRC Inspection Report Nos. 50-245/50-336/50-423: 95-44; 95-82; 96-01; 96-03; 96-04; 96-05; 96-06; 96-08; 96-09; 96-201)
B16996	NNECO letter dated March 2, 1998 M. L. Bowling, Jr. to Director, Office of Enforcement	Millstone Nuclear Power Station, Unit Nos. 1, 2 and 3, Reply to a Notice of Violation and Proposed Imposition of Civil Penalties, (NRC Inspection Report Nos. 50-245/50-336/50-423: 95-44; 95-82; 96-01; 96-03; 96-04; 96-05; 96-06; 96-08; 96-09; 96-201)
B16639	NNECO letter dated July 29, 1997 J. A. Price to NRC	Reference: Licensee Event Report (LER) 97-025-00, Single Failure Vulnerability of the AFW System via the Condenser Hotwell Make-up Valve
B17191	NNECO letter dated April 24, 1998 J. A. Price to NRC	Millstone Nuclear Power Station Unit 2, Licensee Event Report 98-006-00, Reactor Building Closed Cooling Water System Outside Design Basis Upon Loss of Service Water
B16993	NNECO letter dated February 6, 1998 J. A. Price to NRC	Reference: Licensee Event Report (LER) 98-002-00, Emergency Core Cooling System Single Failure Vulnerability
A08201	NU letter dated January 25, 1990 E. J. Mroczka to W. T. Russell	Haddam Neck Plant, Millstone Nuclear Power Station, Unit Nos. 1, 2 and 3, Service Water System - Generic Letter (GL) 89-13
B13137	NU letter dated February 17, 1989 E. J. Mroczka to NRC	Haddam Neck Plant, Millstone Nuclear Power Station, Unit Nos. 1, 2 and 3, Generic Letter 88-14, Instrument Air supply System Problems Affecting Safety-Related Equipment
A07623	NU letter dated December 23, 1988 E. J. Mroczka to NRC	Haddam Neck Plant, Millstone Nuclear Power Station, Unit Nos. 2 and 3, Loss of Decay Heat Removal - Generic Letter 88-17
B13137	NU letter dated February 17, 1989 E. J. Mroczka to NRC	Haddam Neck Plant, Millstone Nuclear Power Station, Unit Nos. 1, 2, and 3, Generic Letter 88-14, Instrument Air Supply System Problems Affecting Safety-Related Equipment
B13137	NU letter dated February 17, 1989 E. J. Mroczka to NRC	Haddam Neck Plant, Millstone Nuclear Power Station, Unit Nos. 1, 2, and 3, Generic Letter 88-14, Instrument Air Supply System Problems Affecting Safety-Related Equipment
12/31/79	NU letter dated 12/31/79 W. G. Council to H. R. Denton	Haddam Neck Plant, Millstone Nuclear Power Station, Unit Nos. 1 and 2, TMI-2 Short Term Lessons-Learned Implementation
A02959	NU letter dated December 7, 1984 W. G. Council to B. J. Youngblood	Millstone Nuclear Power Station, Unit No. 3, Supplement 1 to NUREG-0737, Safety Parameter Display System
A02959	NU letter dated December 7, 1984 W. G. Council to B. J. Youngblood	Millstone Nuclear Power Station, Unit No. 3, Supplement 1 to NUREG-0737, Safety Parameter Display System
A01379	NU letter dated December 31, 1980 W. G. Council to D. G. Eisenhut	Haddam Neck Plant, Millstone Nuclear Power Station, Unit Nos. 1 and 2, Post-TMI Requirements, Implementation of NUREG-0737
A01379	NU letter dated March 18, 1981 W. G. Council to R. A. Clark	Millstone Nuclear Power Station, Unit No. 2, TMI Action Plan Item 11.K.3.2 - PORV Failure Reduction Methods

*Reference order corresponds to Commitment Changes.

REFERENCES *

B11472	NU letter dated February 28, 1985 W. G. Council to T. E. Murley	Millstone Nuclear Power Station, Unit NO. 3, Simulator Training and Examination Program
A01685	NU letter dated July 1, 1981 W. G. Council to T. T. Martin	Millstone Nuclear Power Station, Unit No. 3, I&E Inspection No. 50-423/81-02
B14605	NU letter dated September 10, 1993 J. F. Opeka to NRC	Millstone Nuclear Power Station, Unit No. 2, Reply to a Notice of Violation, Combined Inspection Report Nos. 50-245/93-16; 50-336/93-11; 50-423/93-13
A11271	NRC letter dated October 7, 1993 L. H. Bettenhausen to J. F. Opeka	Requalification Examinations and Requalification Program Evaluation Report 50-245/93-25 (OL)
A11271	NRC letter dated October 7, 1993 L. H. Bettenhausen to J. F. Opeka	Requalification Examinations and Requalification Program Evaluation Report 50-245/93-25 (OL)
3/22/77	NNECO letter dated March 22, 1977 D. C. Switzer to J. P. O'Reilly	Reference: Docket Nos. 50-245, 50-336, I. E. Circular 76-07 Dated 12/17/76
3/22/77	NNECO letter dated March 22, 1977 D. C. Switzer to J. P. O'Reilly	Reference: Docket Nos. 50-245, 50-336, I. E. Circular 76-07 Dated 12/17/76
B13885	NU letter dated August 1, 1991 E. J. Mrocza to T. E. Murley	Millstone Nuclear Power Station, Unit No. 3, Station Blackout Rule, Response to Request for Additional Information (TAC No. 68568)
A05929	NU letter dated August 21, 1986 J. F. Opeka to T. E. Murley	Haddam Neck, Millstone Nuclear Power Station, Units 1 and 2, Response to I&E Inspection No. 50-245/86-06, 50-336/86-06 and 50-213/86-04
9/17/79	NU letter dated September 17, 1979 W. G. Council to R. H. Grier	Millstone Nuclear Power Station, Unit No. 2, Temperature Effects on Level Transmitters, I&E Bulletin No. 79-21
4/24/79	NU letter dated April 24, 1979 W. G. Council to R. H. Grier	Response to IE Bulletin 79-06B
B12491	NU letter dated April 15, 1987 E. J. Mrocza to NRC	Haddam Neck Plant, Millstone Nuclear Power Station, Unit Nos. 1 and 2, Additional Information Concerning Licensed Operator Requalification Programs
B10937	NU letter dated November 18, 1983 W. G. Council to D. G. Eisenhut	Haddam Neck Plant, Millstone Nuclear Power Station, Unit Nos. 1 and 2, NUREG-0737 Item I.A.11, Shift Technical Advisor
B14703	NU letter dated January 5, 1994 J. F. Opeka to Director, Office of Enforcement	Millstone Nuclear Power Station, Unit No. 2, Reply to a Notice of Violation, NRC Inspection Report No. 50-336/93-18"
A11474	NRC letter dated February 22, 1994 J. Stolz to J. F. Opeka	Authorization for Use of a Rubber Expansion Joint As An Alternative To Metal In Accordance With 10 CFR 50.55a(a)(3) (TAC No. M87444)

REFERENCES *

B16996	NNECO letter dated March 2, 1998 M. L. Bowling, Jr. to Director, Office of Enforcement	Millstone Nuclear Power Station, Unit Nos. 1, 2 and 3, Reply to a Notice of Violation and Proposed Imposition of Civil Penalties, (NRC Inspection Report Nos. 50-245/50-336/50-423: 95-44; 95-82; 96-01; 96-03; 96-04; 96-05; 96-06; 96-08; 96-09; 96-201)
B17551	NU letter dated November 19, 1998 M. H. Brothers to NRC	Millstone Nuclear Power Station Unit No. 3, Licensee Event Report 98-042-00, Licensing and Design Basis Review of the Loose Parts Monitoring System Identifies That The Technical Specification Definition of analog Channel Operational Test Is Not Met
A07051	NRC letter dated January 15, 1988 J. F. Stolz to E. J. Mroczka	Millstone Nuclear Power Station, Unit No. 3 IST Program For Pumps And Valves (TAC No. 65326)
A04126	NRC letter dated June 14, 1984 J. R. Miller to W. G. Council	NUREG-0737 Item II.B.3 - Evaluation of Post-Accident Sampling Capabilities
6/13/95	NNECO letter dated June 13, 1995 D.B. Miller to NRC	Reference: Facility Operating License No. NPF-49, Docket No. 50-423, Licensee Event Report 95-011-00
B17736	NU letter dated April 15, 1999 J. A. Price to NRC	Millstone Nuclear Power Station, Unit No. 2, Licensee Event Report 99-007-00, Failure to Monitor Steam Generator Primary and Secondary Coolant Temperatures in Accordance with Technical Specifications, Surveillance Requirement 4.7.2.1
B16996	NNECO letter dated March 2, 1998 M. L. Bowling, Jr. to Director, Office of Enforcement	Millstone Nuclear Power Station, Unit Nos. 1, 2 and 3, Reply to a Notice of Violation and Proposed Imposition of Civil Penalties, (NRC Inspection Report Nos. 50-245/50-336/50-423: 95-44; 95-82; 96-01; 96-03; 96-04; 96-05; 96-06; 96-08; 96-09; 96-201)
B16113	NU letter, dated March 3, 1997 J. A. Price to NRC	Licensee Event Report 95-20-01, Automatic Actuation of an Engineered Safety Feature During Maintenance
B17810	NU letter dated June 23, 1999 C. J. Schwarz to NRC	Millstone Nuclear Power Station, Unit No. 2, Licensee Event Report 99-009-00, Manual Reactor Trip Due to Steam Leak in Turbine Building
B17810	NU letter dated June 23, 1999 C. J. Schwarz to NRC	Millstone Nuclear Power Station, Unit No. 2, Licensee Event Report 99-009-00, Manual Reactor Trip Due to Steam Leak in Turbine Building

*Reference order corresponds to Commitment Changes.