

Docket No. 50-423  
B17349

Attachment 2  
Millstone Nuclear Power Station, Unit No. 3  
Addendum 9 - June 30, 1998 to  
Annual Report dated February 28, 1997

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## INTRODUCTION

None of the plant design changes described herein constitute, nor constituted, an unreviewed safety question per the criteria of 10CFR50.59.

## PLANT DESIGN CHANGES

<u>DCR Number</u>	<u>Title (FSAR Sections, Tables, and Figures Affected)</u>
M3-96054	Containment Quench Spray System, Recirculation Spray System, and Safety Injection System Changes (6.2.1, 6.3.1; processed with FSARCR 97-MP3-550)
M3-96064	Safety Grade Cold Shutdown Analysis (5.4, 6.3, 7.4, 7.6, 9.1, 9.2, 9.3, 10.3, 10.4, T3.6-3, T5.4-7, T9.2-1, T9.2-2, T9.2-10; processed with FSARCR 98-MP3-45)
M3-96069	Containment Quench Spray System, Recirculation Spray System, and Safety Injection System Changes (6.2.1, 6.3.1; processed with FSARCR 97-MP3-550)
M3-96070	Steam Generator Pressure Relief Valve Disc Material Change (T10.3-3; processed with FSARCR 96-MP3-36)
M3-97007	Power Operated Relief Valve Block Valves (5.4.12, 5.4.13; processed with FSARCR 97-MP3-528)
M3-97045	Containment Recirculation System Pump Restriction Orifices (3B, 6.2, 6.5, 7.3, T6.2, T6.3, T7.5, F6.2; processed with FSARCR 97-MP3-543)
M3-97057	Containment Electrical Penetration Area Modifications (FPER 5, 8, T4-1; processed with FSARCR 98-MP3-17)
M3-97093	Active Valve Reconciliation Project (T3.9B-13, T3.9N-12, 9.3.4; processed with FSARCR 97-MP3-592)
M3-97097	Service Water Design Temperature Changes (9.2.1, T9.2-1, T9.2-2); processed with FSARCR 97-MP3-561)



M3-97100	Loss of Component Cooling Water to Chemical Volume Control Letdown Heat Exchanger Modifications (T9.3-5; processed with FSARCR 98-MP3-9)
M3-97102	Emergency Core Cooling System Limited Passive Failure Design Criteria Changes (5.2.5, 6.3.2, T6.3-6; processed with FSARCR 97-MP3-569)
M3-97106	Refueling Water Storage Tank and Quench Spray Pumps Setpoint Changes (6.3.2, 6.3.3, T6.3-11, F6.3-6; processed with FSARCR 97-MP3-594)
M3-97119	Relocation of the Post Accident Sampling Drain (5.2.5, 9.3.2; processed with FSARCR 98-MP3-7)
M3-98003	Inadvertent Safety Injection Actuation at Power (3.9N, 5.4, 7.2, 7.6, 7.7, 8.3, 15.5, T1.10-1, T3.6, T5.4, T15.5-1, F3.6-14, F7.7-4, F15.5; processed with FSARCR 98-MP3-55)
M3-98005	Steam Atmospheric Relief Isolation Valve Reinstatement (3B, 10.3.3; processed with FSARCR 98-MP3-11)
M3-98011	Containment Atmosphere Radiation Monitor Setpoint Change (T1.8-1, 5.2.5; processed with FSARCR 98-MP3-22)
M3-98015	Travel Limiter Installation (T9.2-10; processed with FSARCR 98-MP3-51)

<u>DCN Number</u>	<u>Title (FSAR Sections, Tables, and Figures Affected)</u>
DM3-02-479-97	Containment Isolation System Changes (F6.2-47; processed with FSARCR 97-MP3-545)
DM3-03-479-97	Containment Isolation System Changes (F6.2-47; processed with FSARCR 97-MP3-545)

<u>J-LL-B Number</u>	<u>Title (FSAR Sections, Tables, and Figures Affected)</u>
3-93-181	Temporary Transfer From Calgon Bin to Condensate Chemical Feed System (10.3.5, 10.4.7, F10.3.3(1(A)); processed with FSARCR 98-MP3-58)
3-95-109	Boron Evaporator Reboiler Pump Seal Water Flow Switch Bypass Jumper (F9.3-9(2A)); processed with FSARCR 98-MP3-56)
3-96-108	Oil Water Separator Alternate Discharge Path (10.4.10, F10.4-9(1(A)); processed with FSARCR 98-MP3-50)
3-97-061	Auxiliary Boiler Chemical Addition Tank Flow Vent and Drain Modification (10.4.10, F10.4-9(1(A)); processed with FSARCR 98-MP3-50)
<u>PTSCR Number</u>	<u>Title (FSAR Sections, Tables, and Figures Affected)</u>
3-21-97	Updated Pressure/Temperature Limits Curve (5.2.2, 5.3.2, 5.4.7, 9.3.4; processed with FSARCR 98-MP3-24)
3-27-97	Steam Generator Atmospheric Relief Bypass Valve (10.3.3; processed with FSARCR 97-MP3-578)
3-36-97	Residual Heat Removal System Interlock Setpoint Change (5.4.7, 7.6.2, T5.4-9, F7.6-1; processed with FSARCR 97-MP3-514)

<u>FSARCR Number</u>	<u>Title (FSAR Sections, Tables, and Figures Affected)</u>
97-MP3-539	Gaseous Effluent Releases Changes (11.3.3, T11.3)
97-MP3-547	Environmental Design Conditions Changes (3B)
97-MP3-552	Station Blackout Diesel Cable Installation Clarification (8.3.1)
97-MP3-554	Non-Seismic Vibration Statement Clarification (3.11)
97-MP3-565	Fuel Building Exhaust Monitoring Clarification (T1.8-1, 3.1.2)
97-MP3-583	Clarification to Fission Product Inventories, Spent Fuel Cask Drop Accidents, Feedwater System Malfunctions, Failure of Small Lines, and Pipe Break Sections (15.0, 15.1, 15.2, 15.6, 15.7, T15.7-9)
97-MP3-585	Standard Review Plan Changes (3.6, T3.6, F3.6)
97-MP3-588	Power Operated Relief Valve Leakage Connection Clarification (5.2.5)
97-MP3-590	Ventilation Design Features Changes (9.4.3, 12.3.2, 12.3.3)
97-MP3-595	Fire Protection Program Changes (FPER 3, 4, 5, App B)
97-MP3-596	Post Fire Safe Shutdown Illumination Clarification (9.5.3, FPER 4.4, 7.6, App B)
98-MP3-1	Channel Accuracy Definition Clarification (7.1)
98-MP3-2	System Quality Group Classification Identification Changes (3.2.2, F3.2-2)
98-MP3-5	Missile Protection Clarification and Changes (3.5.1, T3.5-7, T3.5-10, T3.5-11, T3.5-12, T3.5-15)
98-MP3-6	Reactor Coolant System Mass Inventory Balance Change (5.2.2)
98-MP3-8	Bypass Leakage Penetration Clarification (6.2.6, T6.2-65)
98-MP3-10	Single Failure Criterion Conformance Clarifications (3.1.1)



98-MP3-12	Supplementary Leak Collection and Release System Clarification (3.1.2)
98-MP3-13	Radiation Worker Training Description Clarification (12.5.3)
98-MP3-14	Electrical Equipment Not Requiring Internal Cable Separation (T8.3-6)
98-MP3-16	Break Exclusion Zone Definition Clarification (6.2.4, 6.6.8)
98-MP3-20	Reduced Auxiliary Flow Rate Changes (6.3, 10.4, 15.0, 15.2, 15.6, T15.0, T15.2, T15.6, F15.0, F15.2, F15.6)
98-MP3-25	Operational Limits for Reactor Coolant Pump Heat Injection Transients (5.2.2)
98-MP3-26	Changes to Environmental Design Conditions (3.11, T3.11N-1, 3B)
98-MP3-28	Containment Quench Spray System Changes (6.2.1, 6.2.2, 6.5.2, T6.2-60, T6.2-77, T6.2-78)
98-MP3-29	Containment Recirculation Spray Cooler Component Reclassification (T3.2-1, T6.2-62)
98-MP3-33	Main Steam Pressure Relieving Valves Material Change (T10.3-3)
98-MP3-35	Accumulator Isolation Valves Power Supply Clarification (5.4.7)
98-MP3-36	Fan Vibration Criteria Clarification (T1.8-1)
98-MP3-37	Turbine Bypass Valves Changes (10.4.4, T10.1-1)
98-MP3-38	Moisture Separator Chamber Draining Clarification (T1.8-1)
98-MP3-40	Filter Housing Pressure Limit Clarification (T1.8-1, T6.5-1)
98-MP3-41	Secondary Containment Supplementary Leak Collection and Release System Clarification (T6.2-63, T6.5-1)
98-MP3-42	Emergency Generator Closure Ventilation System Changes (9.4.6)

98-MP3-43	Feedwater System Description Changes (15.1.1, 15.1.2, T15.0-2, T15.0-6)
98-MP3-44	Boric Acid Tanks Changes (9.3.4, T9.3-5)
98-MP3-47	Chemical and Volume Control System Excess Letdown Flowpath Limitations (9.3.4)
98-MP3-49	Reactor Coolant Pressure Boundary Leakage Detection Systems (T1.8-1)
98-MP3-53	Residual Heat Removal System Capability for Normal Cooldown (5.4.7, 5.4.16)
98-MP3-57	Water Treating System Demineralizer Bypass, Cross-tie, and System Isolation (9.2.3, F9.2-7(2(A)), F9.2-7(5(A)) )
98-MP3-62	Three Mile Island Action Items Changes (T1.10-1)
98-MP3-64	Auxiliary Feedwater System Initiation Clarification (T1.8-1, T1.10-1)
98-MP3-68	Containment Hydrogen Monitoring Clarification (6.2.5)
98-MP3-69	Pressurizer Valve Interlock Clarification (7.6.8)
98-MP3-70	Reactor Coolant System Volume Increase (T5.1-1, T6.1-2, T6.2-3, T6.2-68)
98-MP3-72	Containment Recirculation Pump Seal Cavity Clarification (6.2.2)
98-MP3-73	Containment Bypass Leakage Penetrations Changes (T6.2-65)
98-MP3-74	Engineered Safety Features Filter Housing Clarification (T1.8-1, T6.5-1)
98-MP3-76	Safety Parameters Display System Computer Point Update (T1.8-1, T1.8N-1, T7.5-1)
98-MP3-77	Reactor Coolant System Check Valve Testing Clarification (5.4.12)
98-MP3-78	Standby Diesel Generator Fuel Oil System Clarification (T1.8-1)

98-MP3-79	Charcoal Adsorber Removal Efficiency Clarification (T1.8-1)
98-MP3-80	Radiation Shielding During Spent Fuel Handling Operations (9.1.4)
98-MP3-85	Emergency Generator Cooling Water Systems Changes (T9.5-3)
98-MP3-86	Radiological Changes and Clarifications (T11.1-2, 15.1.5, 15.6.2, 15.6.3, 15.7.4)
98-MP3-87	Accident Monitoring Instrumentation List Changes (T7.5-1)
98-MP3-88	Environmental Design Conditions Changes (3B)
98-MP3-91	Table of Three Mile Island Action Items Changes (1.10, T1.10-1)
98-MP3-94	Service Water Pump Strainer Motor Switch and Switch Escutcheon Plate Change (9.2.1)
98-MP3-96	Containment Temperature Change (9.2.2, T9.2-7, T9.4-9, T9.4-10)



DCR Number

M3-96054

Title

Containment Quench Spray System, Recirculation Spray System, and Safety Injection System Changes

Description of Change

The design basis of the containment quench spray system, recirculation spray system, and portions of the safety injection system piping and supports were re-qualified to accommodate higher thermal loads. The components within the affected systems were also qualified for a higher operating limit.

Reason for Change

This change was implemented to correct design deficiencies in the safety systems required to mitigate the consequences of a loss of coolant accident or a steam line break inside the containment.

Safety Evaluation

The change to re-rate and qualify piping and components to accommodate higher temperatures does not degrade system capabilities. The loss of service water flow to the recirculation spray system heat exchangers will not impact long-term cooling of the core after an accident and the change does not prevent the safety systems from performing their intended safety function. Therefore, the change is safe and does not constitute an Unreviewed Safety Question.

DCR Number  
M3-96064

Title  
Safety Grade Cold Shutdown Analysis

Description of Change

A new safety grade cold shutdown analysis was incorporated that resolves design deficiencies associated with domestic water storage tank inventory, containment cooling primary temperature, spent fuel pool cooling heat load, residual heat removal system flow control, and service water temperature.

Reason for Change

This change was implemented to reflect actual plant configuration, correct design deficiencies and be consistent with licensing documents.

Safety Evaluation

This change improves the level of plant safety and allows the plant to be put in cold shutdown more quickly. The change is an overall safety benefit. Therefore, the change is safe and does not constitute an Unreviewed Safety Question.



DCR Number  
M3-96069

Title  
Containment Quench Spray System, Recirculation Spray  
System, and Safety Injection System Changes

Description of Change

The design basis of the containment quench spray system, recirculation spray system, and portions of the safety injection system piping and supports were re-qualified to accommodate higher thermal loads. The components within the affected systems were also qualified for a higher operating limit.

Reason for Change

This change was implemented to correct design deficiencies in the safety systems required to mitigate the consequences of a loss of coolant accident or a steam line break inside the containment.

Safety Evaluation

The change to re-rate and qualify piping and components to accommodate higher temperatures does not degrade system capabilities. The loss of service water flow to the recirculation spray system heat exchangers will not impact long-term cooling of the core after an accident and the change does not prevent the safety systems from performing their intended safety function. Therefore, the change is safe and does not constitute an Unreviewed Safety Question.



DCR Number  
M3-96070

Title  
Steam Generator Pressure Relief Valve Disc Material  
Change

Description of Change

The valve disc material was changed from a low carbon cast steel with hard facing product to a low carbon wrought steel with hard facing product.

Reason for Change

This change was implemented to reflect actual plant configuration due to changes in the disc material by the manufacturer.

Safety Evaluation

The original and alternate material properties are essentially equivalent and the change will not degrade the design basis nor alter the performance of the valves. Therefore, the change is safe and does not constitute an Unreviewed Safety Question.

DCR Number  
M3-97007

Title  
Power Operated Relief Valve Block Valves

Description of Change

The reactor coolant system power operated relief valve block valves and actuators were removed and replaced with improved valves and actuators.

Reason for Change

This change was implemented to ensure valve performance under design basis conditions.

Safety Evaluation

This change provides continued assurance that the power operated relief valve block valves will open and close as required to fulfill safety functions for accident mitigation. The change does not have an impact on the seismic performance of the system or the electrical qualification of the cables or actuator. Therefore, the change is safe and does not constitute an Unreviewed Safety Question.

DCR Number  
M3-97045

Title  
Containment Recirculation System Pump Restriction  
Orifices

Description of Change

A flow orifice was installed downstream of each containment recirculation system pump outlet nozzle and the associated valves and interlocks were modified. Containment recirculation system pump casing vents were installed and valve position and logic changes were implemented.

Reason for Change

This change was implemented to reduce flow in the system, thus eliminating the potential for flashing in the suction line and the potential for water hammer in the heat exchanger. This change also prevents vapor lock of the pumps and improves system configuration.

Safety Evaluation

This change is consistent with system design and operating requirements. The containment design pressure, temperature, and liner temperature are not exceeded and the core cooling function of the system following a loss of coolant accident is maintained. Therefore, the change is safe and does not constitute an Unreviewed Safety Question.



DCR Number  
M3-97057

Title  
Containment Electrical Penetration Area Modifications

Description of Change

The copper line that supplies control air to various letdown valves was replaced with stainless steel. Fire stops and tray covers were installed on certain cable trays. Eight additional sprinkler heads were installed and sixteen sprinkler heads were replaced in the electrical penetration area of containment.

Reason for Change

This change was implemented to enhance the fire protection in the electrical penetration area of the containment.

Safety Evaluation

This change enhances the ability to safely shutdown the plant should a fire occur in the containment building. This change is consistent with design and licensing documents. Therefore, the change is safe and does not constitute an Unreviewed Safety Question.

DCR Number  
M3-97093

Title  
Active Valve Reconciliation Project

Description of Change

The total population of active valves was verified and the active function for each valve was identified and documented. This information was consolidated into a new data base and affected programs, procedures and calculations were revised as necessary.

Reason for Change

This change was implemented to ensure all active valves are designed, tested, maintained and operated in accordance with applicable programs and procedures commensurate with their intended safety function.

Safety Evaluation

This change is editorial in nature and all active valves have been designed and qualified to meet licensing requirements. Therefore, the change is safe and does not constitute an Unreviewed Safety Question.

DCR Number  
M3-97097

Title  
Service Water Design Temperature Changes

Description of Change

The temperatures of service water components and piping downstream of the coolers to the circulating water discharge tunnel were revised. Pressure switches were removed and existing or new timers are utilized to delay starting of the booster pumps.

Reason for Change

This change was implemented to reflect revised flow calculations which indicate a decrease in reactor coolant inventory and increase in heat removal by the secondary system.

Safety Evaluation

The rerating of the piping and components, removal of the pressure switches, addition of time delay relays and flow switch setpoint changes have been evaluated and determined to be safe to operate at the revised temperature. Therefore, the change is safe and does not constitute an Unreviewed Safety Question.



DCR Number  
M3-97100

Title  
Loss of Component Cooling Water to Chemical Volume  
Control Letdown Heat Exchanger Modifications

Description of Change

Pipe support modifications were performed and component re-rating was implemented in the chemical and volume control letdown flowpath from the letdown heat exchanger to the volume control tank.

Reason for Change

This change was implemented to incorporate new design basis analysis which revealed the limiting design capability of two diaphragm valves in the flow stream.

Safety Evaluation

The modification and redesign of the support system and replacement of plug valve seals ensures acceptable operation of the chemical and volume control system piping. Therefore, the change is safe and does not constitute an Unreviewed Safety Question.

DCR Number  
M3-97102

Title  
Emergency Core Cooling System Limited Passive Failure  
Design Criteria Changes

Description of Change

A notch was cut in the curb around the auxiliary building pipe tunnel to allow sump overflow to the tunnel. Various administrative changes were incorporated to assist in detecting leaks in the auxiliary or engineered safety features buildings. This change also reinstates the reactor spray system cold leg direct injection flow paths to the engineering design basis.

Reason for Change

This change was implemented to comply with current design basis accident licensing requirements.

Safety Evaluation

This change will either improve the time to detection of an emergency core cooling system limited passive failure or improve response time after a failure is detected but has no impact on its probability.

Reinstatement of the reactor spray system cold leg injection flow path provides assurance the emergency core cooling system performance criteria are satisfied following the most limiting emergency core cooling system passive failure. Therefore, the change is safe and does not constitute an Unreviewed Safety Question.

DCR Number  
M3-97106

Title  
Refueling Water Storage Tank and Quench Spray Pumps  
Setpoint Changes

Description of Change

The tank empty level setpoint of the refueling water storage tank which trips the quench spray pumps, closes the containment isolation valves, and actuates a tank empty alarm was changed. Additionally, the refueling water storage tank drawdown and switchover times were revised and the emergency core cooling system runout flow rates were changed.

Reason for Change

This change was implemented to reflect actual plant configuration and document revisions in the refueling water storage tank drawdown and switchover analysis resulting from new emergency core cooling system runout flow rates and associated analyses. The refueling water storage tank level setpoint change was implemented to reflect an increase in the assumed instrument uncertainties.

Safety Evaluation

This change is editorial in nature and is consistent with design and licensing documents. All systems and components continue to function with no change in performance, and with no reduction in margin of safety. Therefore, the change is safe and does not constitute an Unreviewed Safety Question.



DCR Number  
M3-97119

Title  
Relocation of the Post Accident Sampling Drain

Description of Change

The post accident sampling system sample flush and drain line was extended and rerouted from the containment unidentified leakage sump to the containment drains sump.

Reason for Change

This change was implemented to direct the known sample flush and drain water to the proper sump for processing as radioactive waste.

Safety Evaluation

This change enhances the ability to monitor for unidentified leakage inside containment. This drain line performs no safety-related function in the mitigation of any design basis accident nor does it initiate any accident. If for any reason the drain pathway is blocked, an alternative pathway to the charging pumps suction is available. Therefore, the change is safe and does not constitute an Unreviewed Safety Question.

DCR Number  
M3-98003

Title  
Inadvertent Safety Injection Actuation at Power

Description of Change

The power operated relief valves opening circuitry was upgraded to safety grade in the safety analysis for the inadvertent safety injection event.

Reason for Change

This change was implemented to qualify the pressurizer power operated relief valves and associated piping for water release, upgrade the power operated relief valves control circuitry for automatic actuation and bypass the thermal overload limit switch for opening the power operated relief valves block valve.

Safety Evaluation

This change provides added assurance that the operators will be able to mitigate an inadvertent emergency core cooling system actuation at power without challenging the pressurizer safety valves during solid water conditions. Although the change in the power operated relief valves logic does increase the probability that the power operated relief valves will inadvertently open and remain open, multiple failures are necessary for this to occur and the consequences are bounded by the current accident analysis. This change is an Unreviewed Safety Question determined to be safe.

DCR Number  
M3-98005

Title  
Steam Atmospheric Relief Isolation Valve Reinstatement

Description of Change

The steam atmospheric relief isolation valves were reinstated into the equipment environmental qualification program.

Reason for Change

This change was implemented to reflect actual plant configuration and to allow taking credit for the valve operation in a harsh environment.

Safety Evaluation

Adding the main steam pressure relief valve isolation valves to the equipment environmental qualification list assures that they are available to operate in the event of a failed open main steam pressure relief valve. This will provide assurance to the operator that the discharge of the steam generator to the environment can be isolated. Therefore, the change is safe and does not constitute an Unreviewed Safety Question.



DCR Number  
M3-98011

Title  
Containment Atmosphere Radiation Monitor Setpoint  
Change

Description of Change

The ALERT and ALARM setpoints for the containment atmosphere particulate and gaseous radiation monitor system were revised downward to respond, within one hour, to a one gallon per minute reactor coolant leak.

Reason for Change

This change was implemented to be consistent with setpoint basis and regulatory guidance.

Safety Evaluation

The changing of the setpoints to lower values makes the coolant leak detection process more safe. Therefore, the change is safe and does not constitute an Unreviewed Safety Question.

DCR Number

M3-98015

Title

Travel Limiter Installation

Description of Change

Travel limiters were installed on the 3-way temperature control valves which fail open upon loss of instrument air to direct flow through the service water cooled charging pump coolers. In addition, the charging pump lube oil pressure relieving valve was adjusted.

Reason for Change

This change was implemented to prevent full stem travel so that on a loss of air signal with low service water temperature, heat exchanger bypass flow is sufficient to maintain a minimum lube oil temperature. The limiters will also provide adequate cooling flow with high service water temperatures.

Safety Evaluation

This change ensures that the emergency core cooling system components are operated within their design limits consistent with the assumption in the final safety analysis report accident analysis. There are no changes to the functional requirements for any safety related systems, structures or components. The change does not degrade the performance of any safety system of prevent actions assumed in the accident analysis. Therefore, the change is safe and does not constitute an Unreviewed Safety Question.

DCN Number  
DM3-02-479-97

Title  
Containment Isolation System Changes

Description of Change

The vent, drain, leakage monitoring, and test connections consisting of a single valve and located between containment isolation valves were modified to have closures.

Reason for Change

This change was implemented to provide an additional barrier between the containment atmosphere and the atmosphere outside containment.

Safety Evaluation

This change protects the valve and does not compromise containment integrity. This change does not affect the design or operation of any system penetrating containment nor does it affect the ability of the penetration to maintain pressure boundary. Therefore, the change is safe and does not constitute an Unreviewed Safety Question.



DCN Number  
DM3-03-479-97

Title  
Containment Isolation System Changes

Description of Change

The vent, drain, leakage monitoring, and test connections consisting of a single valve and located between containment isolation valves were modified to have closures.

Reason for Change

This change was implemented to provide an additional barrier between the containment atmosphere and the atmosphere outside containment.

Safety Evaluation

This change protects the valve and does not compromise containment integrity. This change does not affect the design or operation of any system penetrating containment nor does it affect the ability of the penetration to maintain pressure boundary. Therefore, the change is safe and does not constitute an Unreviewed Safety Question.

Bypass Jumper

Number

3-93-181

Title

Temporary Transfer From Calgon Bin to Condensate  
Chemical Feed System

Description of Change

Stainless steel tubing and associated valves, controller, pump, gauge and pressure regulator were installed to transfer ethanolamine from a calgon bin to the normal chemical measuring tank fill line.

Reason for Change

This change was implemented to enhance water chemistry control of the secondary plant systems. The bypass jumper is still installed.

Safety Evaluation

This change enhances water chemistry control and does not affect safety related components. Therefore, the temporary change is safe and does not constitute an Unreviewed Safety Question.

Bypass Jumper

Number

3-95-109

Title

Boron Evaporator Reboiler Pump Seal Water Flow Switch  
Bypass Jumper

Description of Change

The low seal water flow alarm and associated flow switch interlock for the boron evaporator reboiler pump was disconnected.

Reason for Change

This temporary change was implemented to eliminate nuisance pump trips and alarms, due to the flow switch malfunction, until a permanent design change can be implemented. The bypass jumper is still installed.

Safety Evaluation

Compensatory measures are in place to check for adequate seal flow, detect leakage, and prevent damage to the pump. Therefore, the temporary change is safe and does not constitute an Unreviewed Safety Question.



Bypass Jumper  
Number  
3-96-108

Title  
Oil Water Separator Alternate Discharge Path

Description of Change

The auxiliary boiler room oil water separator effluent discharge path was changed from manhole number fifteen to the circulating water tunnel.

Reason for Change

This change was implemented to prevent the discharge of hydrazine to manhole number fifteen. The bypass jumper is still installed.

Safety Evaluation

The bypass jumper enhances control of the discharge of hydrazine and does not impact any safety related systems or components. Therefore, the change is safe and does not constitute an Unreviewed Safety Question.

Bypass Jumper

Number

3-97-061

Title

Auxiliary Boiler Chemical Addition Tank Flow Vent and  
Drain Modifications

Description of Change

The vent and drain lines of the auxiliary boiler chemical addition tank were routed to temporary collection containers.

Reason for Change

This change was implemented to prevent water with a high hydrazine concentration from entering floor drains. The bypass jumper is still installed.

Safety Evaluation

The bypass jumper enhances control of hydrazine and does not impact any safety related systems or components. Therefore, the change is safe and does not constitute an Unreviewed Safety Question.

PTSCR Number  
3-21-97

Title  
Updated Pressure/Temperature Limits Curves

Description of Change

This change incorporated the current pressure/temperature limits, corresponding cold overpressure protection requirements and a revised cold overpressure protection enabling temperature.

Reason for Change

This change was implemented to reflect actual plant configuration and to be consistent with design and licensing documents.

Safety Evaluation

This change is editorial in nature and ensures that heatup, cooldown and low temperature operation does not compromise the structural margins of safety of the system pressure boundary. Therefore, the change is safe and does not constitute an Unreviewed Safety Question.



PTSCR Number  
3-27-97

Title  
Steam Generator Atmospheric Relief Bypass Valve  
Proposed Technical Specifications Change Request

Description of Change

A new Technical Specification and associated bases section was incorporated to provide information about the required number of steam generator atmospheric relief bypass valve's, allowed outage times, and surveillance frequency.

Reason for Change

This change was implemented to conform to licensing requirements and required actions contained in Westinghouse Improved Standard Technical Specifications.

Safety Evaluation

This change is editorial in nature and adds a new Technical Specification limiting condition for operation and associated surveillance requirements to ensure accident mitigating functional capability. Therefore, the change is safe and does not constitute an Unreviewed Safety Question.

PTSCR Number  
3-36-97

Title  
Residual Heat Removal System Interlock Setpoint Change

Description of Change

The reactor coolant system low pressure interlock setpoint was changed from 390 psig to 412.5 psia.

Reason for Change

This change was implemented to reflect actual plant configuration and to be consistent with design and licensing documents.

Safety Evaluation

This change accounts for instrument calibration accuracy's and deadband resets but does not change the operation of the residual heat removal system. Therefore, the change is safe and does not constitute an Unreviewed Safety Question.

FSARCR Number  
97-MP3-539

Title  
Gaseous Effluent Releases Changes

Description of Change

The description of the potentially radioactive gaseous release paths for the Unit 1 stack, the engineered safety features building normal ventilation system, the steam generator blowdown flash tank vent, and the turbine building normal ventilation was clarified and corrected.

Reason for Change

This change was implemented to reflect actual plant configuration and to be consistent with design and licensing documents.

Safety Evaluation

This change is editorial in nature and does impact the ability of the systems to perform their function of monitoring radioactivity of gaseous effluents. Therefore, the change is safe and does not constitute an Unreviewed Safety Question.



FSARCR Number  
97-MP3-547

Title  
Environmental Design Conditions Changes

Description of Change

The equipment environmental qualification classification for fuel building zone FB-05 was changed from a "mild" environment to a "harsh" environment.

Reason for Change

This change was implemented to reflect the actual design classification for the zone. The original classification was changed to "mild" to reflect field modifications which were not performed.

Safety Evaluation

This change is editorial in nature and is consistent with design and licensing documents. Therefore, the change is safe and does not constitute an Unreviewed Safety Question.

FSARCR Number  
97-MP3-552

Title  
Station Blackout Diesel Cable Installation Clarification

Description of Change

A clarification was incorporated into the cable installation description to discuss the approximately four feet of cable between the cable tray and each duct bank which is unprotected by conduit or a cable tray.

Reason for Change

This change was implemented to reflect actual plant configuration and to clarify that the transition area is installed in open air and only protected by the cable jacket.

Safety Evaluation

The cables outside the duct bank or cable tray are capable of withstanding physical loading as prescribed in the local building code and conform to licensing requirements. Therefore, the change is safe and does not constitute an Unreviewed Safety Question.

FSARCR Number  
97-MP3-554

Title  
Non-Seismic Vibration Statement Clarification

Description of Change

The description of how the effects of non seismic vibration are considered as part of the regular in service surveillance and preventative maintenance programs was incorporated into the environmental conditions section.

Reason for Change

This change was implemented to be consistent with current industry standards and to reflect actual plant surveillance and maintenance programs.

Safety Evaluation

This change provides early warning against premature failure due to non seismic vibration and does not otherwise impact operation of the facility. Therefore, the change is safe and does not constitute an Unreviewed Safety Question.



FSARCR Number  
97-MP3-565

Title  
Fuel Building Exhaust Monitoring Clarification

Description of Change

The requirements of the fuel building ventilation system exhaust to be remote manually diverted to its exhaust filtration system on receiving a high area radiation alarm were deleted.

Reason for Change

This change was implemented to reflect actual plant configuration because the area radiation monitor does not perform the function of measuring the air contamination in the fuel building ventilation system.

Safety Evaluation

This change is editorial in nature and does prevent potentially contaminated air from leaving the fuel building. Therefore, the change is safe and does not constitute an Unreviewed Safety Question.

FSARCR Number  
97-MP3-583

Title  
Clarifications to Fission Product Inventories, Spent Fuel  
Cask Drop Accidents, Feedwater System Malfunctions,  
Failure of Small Lines, and Pipe Break Sections

Description of Change

Various editorial changes were incorporated into the text of the Chapter 15 descriptions in the Final Safety Analysis Report.

Reason for Change

This change was implemented to reflect actual plant configuration and to be consistent with design and licensing documents.

Safety Evaluation

This change is editorial in nature and does not change the accident analysis described in Chapter 15 of the final safety analysis report. Therefore, the change is safe and does not constitute an Unreviewed Safety Question.

FSARCR Number  
97-MP3-585

Title  
Standard Review Plan Changes

Description of Change

The text and tables that describe effects of postulated pipe ruptures were revised and the results of pipe break analysis were evaluated for potential damage to essential systems and incorporated into a specific table.

Reason for Change

This change was implemented to reflect actual plant configuration and to be consistent with design and licensing documents.

Safety Evaluation

This change is editorial in nature and there are no changes to system design specification, operating parameters or methodology, nor any additional conditions that would cause the system to be outside its design envelope. Therefore, the change is safe and does not constitute an Unreviewed Safety Question.



FSARCR Number  
97-MP3-588

Title  
Power Operated Relief Valve Leakage Connection  
Clarification

Description of Change

The reference to power operated relief valves was ~~deleted~~ from the list of valves that have their valve stem leakoff lines piped to the reactor plant gaseous waste drains header.

Reason for Change

This change was implemented to reflect actual plant conditions because the design of these valves does not utilize leakoff connections.

Safety Evaluation

This change is editorial in nature and is a valve design enhancement which prevents a release of reactor coolant that was formerly associated with valve stem leakoff. Therefore, the change is safe and does not constitute an Unreviewed Safety Question.

FSARCR Number  
97-MP3-590

Title  
Ventilation Design Features Changes

Description of Change

A clarification was incorporated to allow for exceptions to the general practice of ventilation flow being from areas of potential low contamination to areas of high contamination.

Reason for Change

This change was implemented to reflect actual plant configuration and to clarify that typical conditions change during winter mode alignment.

Safety Evaluation

This change is editorial in nature and the recirculation winter mode of operation does not effect offsite dose. Therefore, the change is safe and does not constitute an Unreviewed Safety Question.

FSARCR Number  
97-MP3-595

Title  
Fire Protection Program Changes

Description of Change

The description of the combustible loading section of each fire area and zone were changed to revise the types of combustible materials, relative fire severity, and area and zone dimensions. In addition, the descriptions of the underground fire protection water supply piping, fire brigade breathing air, and station black out fire protection system cutout valve alignment were changed.

Reason for Change

This change was implemented to reflect actual plant configuration and to be consistent with design and licensing documents.

Safety Evaluation

This change is editorial in nature and does not change plant equipment, barriers/boundaries, or any actions associated with limiting any fire protection equipment. Therefore, the change is safe and does not constitute an Unreviewed Safety Question.



FSARCR Number  
97-MP3-596

Title  
Post Fire Safe Shutdown Illumination Clarifications

Description of Change

A change was made to include security lighting to the description of lighting available to support operator actions for access or egress between buildings to support safe shutdown post fire events.

Reason for Change

This change was implemented to correct an error in the licensing basis of the plant and to include outside lighting in the evaluation of fire safe shutdown lighting.

Safety Evaluation

This change is editorial in nature and does not reduce the ability to achieve and maintain safe shutdown in the event of a fire. Therefore, the change is safe and does not constitute an Unreviewed Safety Question.

FSARCR Number  
98-MP3-1

Title  
Channel Accuracy Definition Clarification

Description of Change

The definition of channel accuracy was corrected to clarify what effects are included in determining the accuracy.

Reason for Change

This change was implemented to correct the definition of channel accuracy and reflect industry standards.

Safety Evaluation

This change is editorial in nature and does not impact the calculation of instrument uncertainty. Therefore, the change is safe and does not constitute an Unreviewed Safety Question.

FSARCR Number  
98-MP3-2

Title  
System Quality Group Classification Identification  
Changes

Description of Change

The system quality group classification text was revised to indicate the requirements for plant equipment identification conventions is being controlled via engineering design specifications.

Reason for Change

This change was implemented to reflect actual plant configuration and to be consistent with design documents.

Safety Evaluation

This change is editorial in nature and is consistent with design and licensing documents. Therefore, the change is safe and does not constitute an Unreviewed Safety Question.



FSARCR Number  
98-MP3-5

Title  
Missile Protection Clarifications and Changes

Description of Change

Various editorial changes were incorporated into the text and tables which describe missile protection.

Reason for Change

This change was implemented to correctly identify potential missile probability and probability data not previously available. The change also provides clarification regarding valve missiles and their evaluation and corrects terms in equations which were previously omitted.

Safety Evaluation

This change is editorial in nature and does not result in any less conservative evaluation of missile generation or damage. Therefore, the change is safe and does not constitute an Unreviewed Safety Question.

FSARCR Number  
98-MP3-6

Title  
Reactor Coolant System Mass Inventory Balance Change

Description of Change

An alternate provision for maintaining a reactor coolant system mass inventory balance prior to isolating the residual heat removal system was incorporated into the precaution recommendation text.

Reason for Change

This change was implemented to minimize the potential for developing an overpressurization transient during system operation when solid water operation may be possible.

Safety Evaluation

This change is editorial in nature and does not increase the probability of an overpressure transient because the residual heat removal system letdown path is not removed from service until reactor coolant system inventory mass balance is established through an alternate flowpath. Therefore, the change is safe and does not constitute an Unreviewed Safety Question.

FSARCR Number  
98-MP3-8

Title  
Bypass Leakage Penetration Clarifications

Description of Change

Additional bypass leakage paths were identified, classified and incorporated into the corresponding containment penetration tables.

Reason for Change

This change was implemented to reflect actual plant configuration resulting from correcting previous calculations.

Safety Evaluation

This change is editorial in nature and is consistent with design and licensing documents. Therefore, the change is safe and does not constitute an Unreviewed Safety Question.



FSARCR Number  
98-MP3-10

Title  
Single Failure Criterion Conformance Clarifications

Description of Change

The description for single failure criterion was corrected and inconsistencies between plant design features and the description and application of the single failure criterion were clarified.

Reason for Change

This change was implemented to reflect actual plant configuration and the original single failure design philosophy.

Safety Evaluation

This change has no impact on the functional and operational design basis of any plant system, structure or component. Therefore, the change is safe and does not constitute an Unreviewed Safety Question.

FSARCR Number  
98-MP3-12

Title  
Supplementary Leak Collection and Release System  
Clarification

Description of Change

The description of the supplementary leak collection and release system was changed by deleting the reference to a fuel handling accident.

Reason for Change

This change was implemented to reflect actual plant configuration because the fuel handling accident activity retained in the containment atmosphere is reduced by the containment air filtration system and purged under controlled conditions.

Safety Evaluation

This change is editorial in nature and is consistent with design and licensing documents. Therefore, the change is safe and does not constitute an Unreviewed Safety Question.

FSARCR Number  
98-MP3-13

Title  
Radiation Worker Training Description Clarifications

Description of Change

The description of the radiation worker training program was changed to clarify that verification of prior training is permitted for new personnel and that personnel outside the training department are recognized as able to provide radiation worker training. Other minor editorial changes were incorporated and the specific quotation of test objectives was deleted.

Reason for Change

This change was implemented to correct identified inadequacies in the program and to reflect the current approach for radiation worker training.

Safety Evaluation

This change is editorial in nature and is consistent with existing licensing documents. Therefore, the change is safe and does not constitute an Unreviewed Safety Question.



FSARCR Number  
98-MP3-14

Title  
Electrical Equipment Not Requiring Internal Cable  
Separation

Description of Change

The emergency diesel generator air dryer panels were added to the table in the final safety analysis report which lists equipment not requiring internal cable separation.

Reason for Change

This change was implemented to reflect the actual plant configuration because the circuits in the panels have been isolated through qualified isolation devices.

Safety Evaluation

This change is editorial in nature and the wiring to the diesel generator panels are properly isolated. Therefore, the change is safe and does not constitute an Unreviewed Safety Question.

FSARCR Number  
98-MP3-16

Title  
Break Exclusion Zone Definition Clarification

Description of Change

The definition of the break exclusion zone for the containment vacuum system pump suction penetrations and hydrogen recombiner system suction penetrations were revised along with the augmented inservice inspection requirements.

Reason for Change

This change was implemented to reflect actual plant configuration and to be consistent with design and licensing documents.

Safety Evaluation

This change is editorial in nature and the containment isolation system will continue to function as designed. Therefore, the change is safe and does not constitute an Unreviewed Safety Question.

FSARCR Number

98-MP3-20

Title

Reduced Auxiliary Flow Rate Changes

Description of Change

The text, tables, and figures which describe various accident conditions were changed to incorporate new analyses using revised auxiliary feedwater flows and increased turbine driven pump startup delay time.

Reason for Change

This change was implemented to reflect actual plant configuration and to incorporate new Feedwater Line Break analysis and new Loss of Normal Feedwater flow/Loss of AC Power analysis.

Safety Evaluation

This change is editorial in nature and is consistent with design and licensing documents. The change does not affect or introduce new malfunctions, nor affect the Loss Of Coolant Accident and main steam line break mass and energy release values. Therefore, the change is safe and does not constitute an Unreviewed Safety Question.



FSARCR Number  
98-MP3-25

Title  
Operational Limits for Reactor Coolant Pump Heat  
Injection Transients

Description of Change

The description of restrictions for starting the first reactor coolant pump during water-solid conditions was revised.

Reason for Change

This change was implemented to reflect actual plant configuration and to provide additional operational flexibility.

Safety Evaluation

A combination of operator action and existing pressure margin between the pre-pump startup reactor coolant system pressure and the relief valve setpoint will minimize the probability that the relief valve will actuate. Therefore, the change is safe and does not constitute an-Unreviewed Safety Question.

FSARCR Number  
98-MP3-26

Title  
Changes to Environmental Design Conditions

Description of Change

Portions of the environmental qualification text and the discussion of normal and accident environments were revised.

Reason for Change

This change was implemented to maintain consistency between the final safety analysis report, the environmental qualification program manual and design specification.

Safety Evaluation

This change provides consistency with the environmental design specification and licensing documents. The analysis results from program documents does not increase the probability or consequences of a postulated accident nor does it introduce an accident of a different type. Therefore, the change is safe and does not constitute an Unreviewed Safety Question.

FSARCR Number  
98-MP3-28

Title  
Containment Quench Spray System Changes

Description of Change

Several containment quench spray system related assumptions were revised and incorporated into the text and tables which describe the system.

Reason for Change

This change was implemented to reflect actual plant configuration and to be consistent with current design documents.

Safety Evaluation

This change is editorial in nature and does not change the ability of the containment spray to operate as needed to reduce containment pressure and scrub fission products following design basis accidents described in the final safety analysis report. Therefore, the change is safe and does not constitute an Unreviewed Safety Question.



FSARCR Number  
98-MP3-29

Title  
Containment Recirculation Spray Cooler Component  
Reclassification

Description of Change

The indicated classification of the containment spray cooler tube side and shell side was corrected.

Reason for Change

This change was implemented to reflect actual plant configuration.

Safety Evaluation

This change is editorial in nature and is consistent with design and licensing documents. Therefore, the change is safe and does not constitute an Unreviewed Safety Question.

FSARCR Number  
98-MP3-35

Title  
Main Steam Pressure Relieving Valves Material Change

Description of Change

The material specified for the main steam pressure relieving valves bonnet bolts was revised to include Grade 7 in addition to Grade 2H.

Reason for Change

This change was implemented to reflect actual plant configuration and to be consistent with design documents.

Safety Evaluation

This change is editorial in nature and the two grades have the identical mechanical properties and therefore will behave the same. Therefore, the change is safe and does not constitute an Unreviewed Safety Question.

FSARCR Number  
98-MP3-35

Title  
Accumulator Isolation Valves Power Supply Clarification

Description of Change

The statement that all four of the motor operated accumulator isolation valves are powered from the same electrical train was deleted. The correct statement that two of the accumulator isolations are powered from the orange safety train and two valves are powered from the purple safety train was added.

Reason for Change

This change was implemented to reflect actual plant conditions and to be consistent with design documents.

Safety Evaluation

This change is editorial in nature and since there is no power to the valves during normal plant operation the valves will always be aligned consistent with the accident analysis regardless of the availability of power to the valve operator. Therefore, the change is safe and does not constitute an Unreviewed Safety Question.



FSARCR Number  
98-MP3-36

Title  
Fan Vibration Criteria Clarification

Description of Change

The description of fan vibration performance criteria was revised.

Reason for Change

This change was implemented to demonstrate the degree of compliance with licensing documents and to define acceptance standards.

Safety Evaluation

This change is consistent with design documents and meets the intent of licensing documents. Therefore, the change is safe and does not constitute an Unreviewed Safety Question.

FSARCR Number  
98-MP3-37

Title  
Turbine Bypass Valves Changes

Description of Change

The reference to periodic partial stroke testing of the valves was deleted and clear descriptions of the valve stroke time requirements and the valve controls were incorporated into the text.

Reason for Change

This change was implemented to more accurately reflect the design basis of the turbine bypass valves.

Safety Evaluation

This editorial change clarifies the relationship of the operation of the turbine bypass valves with the reactor protection system. The change has no affect upon the main steam system to provide safety related plant cooldown or secondary plant overpressurization protection. Therefore, the change is safe and does not constitute an Unreviewed Safety Question.

FSARCR Number  
98-MP3-38

Title  
Moisture Separator Chamber Draining Clarification

Description of Change

An additional exception was added to the degree of compliance text stating that "Condensate from the moisture separator chamber will continue to drain via normally open drain valves."

Reason for Change

This change was implemented to reflect actual plant configuration and to provide clarification on open/closed status of drain valves.

Safety Evaluation

This change is editorial in nature and does is consistent with design and licensing documents. Therefore, the change is safe and does not constitute an Unreviewed Safety Question.



FSARCR Number  
98-MP3-40

Title  
Filter Housing Pressure Limit Clarification

Description of Change

Additional clarification was added to the text which describes how Millstone 3 complies with designing inlet units and components which can be isolated from the fan to withstand a peak negative pressure by ensuring that such isolation is precluded via the design logic between the fans and the inlet dampers.

Reason for Change

This change was implemented to reflect actual plant configuration.

Safety Evaluation

This change is editorial in nature and is consistent with design and licensing documents. Therefore, the change is safe and does not constitute an Unreviewed Safety Question.

FSARCR Number

98-MP3-41

Title

Secondary Containment Supplementary Leak Collection  
and Release System Clarifications

Description of Change

The indicated secondary containment supplementary leak collection and release system equipment design capacities were revised to be consistent with the actual equipment maximum capacities.

Reason for Change

This change was implemented to reflect actual plant configuration and to ensure the licensing requirements of the system are bounded by the filtration maximum capacity.

Safety Evaluation

This change revises design parameters of the filtration units. The filtration units will continue to function properly with the new maximum flow rates and will continue to perform their safety functions. Therefore, the change is safe and does not constitute an Unreviewed Safety Question.

FSARCR Number  
98-MP3-42

Title  
Emergency Generator Closure Ventilation System  
Changes

Description of Change

The reference to "...minimum open position" was deleted from the description of the diesel generator enclosure air inlet dampers.

Reason for Change

This change was implemented to reflect actual plant configuration because the dampers have no provisions to prevent full closure.

Safety Evaluation

The damper stops do not prevent the dampers from opening nor enable the dampers to open. Failure of the dampers to open does not preclude the ability of the exhaust fan to operate as designed. Therefore, the change is safe and does not constitute an Unreviewed Safety Question.



FSARCR Number  
98-MP3-43

Title  
Feedwater System Description Changes

Description of Change

Various changes were incorporated into the text, tables and description of the feedwater system malfunction events.

Reason for Change

This change was incorporated to reflect actual plant configuration and the results of recent reanalyses.

Safety Evaluation

This change is editorial in nature and is consistent with design and licensing documents. Revised analyses and evaluations were performed and the results show the conclusions of the affected sections are unchanged. Therefore, the change is safe and does not constitute an Unreviewed Safety Question.

FSARCR Number  
98-MP3-44

Title  
Boric Acid Tanks Changes

Description of Change

The references to the low-low alarm were deleted and a revised capacity and descriptive footnote were added to the description of the boric acid tanks.

Reason for Change

This change was implemented to reflect actual plant configuration and to be consistent with design documents.

Safety Evaluation

This change is editorial in nature and does not impact any boric acid tank setpoint or storage requirement. The change does not alter the function of the system nor prevent it from performing its intended function. Therefore, the change is safe and does not constitute an Unreviewed Safety Question.

FSARCR Number

98-MP3-47

Title

Chemical and Volume Control System Excess Letdown  
Flowpath Limitations

Description of Change

The description of the chemical and volume control system excess letdown flowpath was changed to restrict the use of the excess letdown flowpath to those cases where the normal letdown flowpath is inoperable.

Reason for Change

This change was implemented to prevent outlet temperatures being higher than analyzed in the event of loss of cooling to the excess letdown heat exchanger and the potential damage to the charging pumps.

Safety Evaluation

The use of the excess letdown will be limited to those cases where normal letdown is unavailable therefore, postulating failure of the chemical and volume control systems is not required. During safety grade cold shutdown, the design basis relief path is from the reactor vessel head vent to the pressurizer relief tank and therefore does not impact the safety grade cold shutdown. For the unlikely instance in which normal letdown is unavailable, the safety grade alternate letdown path via the reactor vessel head vent to the pressurizer relief tank may be used. Therefore, the change is safe and does not constitute an Unreviewed Safety Question.



FSARCR Number  
98-MP3-49

Title  
Reactor Coolant Pressure Boundary Leakage Detection  
Systems

Description of Change

The degree of compliance was revised to eliminate the need to provide a procedure that determines a reactor coolant pressure boundary leak rate based on containment atmosphere gaseous and particulate radioactivity monitoring system.

Reason for Change

This change was implemented to reflect actual plant configuration because a procedure does not exist for this activity due to the large number of variables which would be unknown at the time of a leak.

Safety Evaluation

This change is editorial in nature and presently leak rates are determined using the plant process computer. Therefore, the change is safe and does not constitute an Unreviewed Safety Question.

FSARCR Number  
98-MP3-53

Title  
Residual Heat Removal System Capability for Normal  
Cooldown

Description of Change

The text which describes plant operation during normal cooldown was revised to state that for a normal plant cooldown the residual heat removal system is capable of cooling the reactor coolant from 350 degrees F to 200 degrees F in 60 hours for one reactor coolant system pump operating and 122 hours for two reactor coolant system pumps operating.

Reason for Change

This change was implemented to reflect current operating procedures for normal cooldown and results of revised analysis.

Safety Evaluation

This change is editorial in nature and provides assurance that normal cooling, performed in accordance with plant operating procedures, meet licensing time requirements for reaching cold shutdown. Therefore, the change is safe and does not constitute an Unreviewed Safety Question.

FSARCR Number  
98-MP3-57

Title  
Water Treating System Demineralizer Bypass, Cross-tie,  
and System Isolation

Description of Change

This change documents the temporary modifications (B/J: 3-86-100/3-94-042/3-86-118) which installed a direct path from the water treatment system filtration skids to the final filtration and demineralization equipment. A blank-off plate was also installed to isolate a portion of the water treatment system currently not in use and a cross-tie was installed to supply or transfer makeup water between Unit 2 and Unit 3.

Reason for Change

This change was implemented to provide a means to supply or transfer makeup water to Unit 2 and to provide a direct water treatment path to the final filtration and demineralization equipment. The temporary modifications are still installed.

Safety Evaluation

This change does not degrade any safety component design or function and the licensing conductivity requirements continue to be met. Therefore, the change is safe and does not constitute an Unreviewed Safety Question.



FSARCR Number  
98-MP3-62

Title  
Three Mile Island Action Items Changes

Description of Change

The table which describes the Unit 3 position on various Three Mile Island items was revised to clarify the description and results of a new small break loss of coolant accident analysis.

Reason for Change

This change was implemented to reflect new analysis resulting from core modifications and to be consistent with design and licensing documents.

Safety Evaluation

This change is editorial in nature and the new analysis shows that the probability for introducing a small break loss of coolant accident resulting from a stuck-open power operated relief valve is substantially unaffected by confining anticipatory reactor trip to higher power levels. Therefore, the change is safe and does not constitute an Unreviewed Safety Question.

FSARCR Number

98-MP3-64

Title

Auxiliary Feedwater System Initiation Clarification

Description of Change

The description of auxiliary feedwater system initiation was revised to clarify that manual auxiliary feedwater system initiation is accomplished by the operator starting the pumps.

Reason for Change

This change was implemented to add additional information and to clarify compliance with licensing documents.

Safety Evaluation

This change is editorial in nature and is consistent with design and licensing documents. Therefore, the change is safe and does not constitute an Unreviewed Safety Question.

FSARCR Number

98-MP3-68

Title

Containment Hydrogen Monitoring Clarification

Description of Change

The time duration required to place the containment hydrogen monitoring system in service after an accident was added to the system description.

Reason for Change

This change was implemented to reflect a maximum time required for an operator to place hydrogen monitors in service and to acknowledge the deviation from licensing documents.

Safety Evaluation

This change is editorial in nature and does not compromise accident mitigation or hydrogen monitoring requirements. Therefore, the change is safe and does not constitute an Unreviewed Safety Question.



FSARCR Number  
98-MP3-69

Title  
Pressurizer Valve Interlock Clarification

Description of Change

The description of the pressurizer power operated relief and block valves was corrected to state that, when in auto control, the interlock would open the block valves.

Reason for Change

This change was implemented to reflect actual plant configuration and to be consistent with design documents.

Safety Evaluation

This change is editorial in nature and the interlocks were evaluated to demonstrate that they provide the required mechanical flow path. Therefore, the change is safe and does not constitute an Unreviewed Safety Question.

FSARCR Number  
98-MP3-70

Title  
Reactor Coolant System Volume Increase

Description of Change

The various tables that reference reactor coolant system volume and mass parameters were revised to reflect as built values.

Reason for Change

This change was implemented to correct volume discrepancies resulting from changes to the initial reactor coolant system design.

Safety Evaluation

This change is editorial in nature and all acceptance criteria for the design and safety analysis continue to be met. Therefore, the change is safe and does not constitute an Unreviewed Safety Question.

FSARCR Number  
98-MP3-72

Title  
Containment Recirculation Pump Seal Cavity  
Clarification

Description of Change

The text in the description of the containment recirculation pump seal design and operation was revised.

Reason for Change

This change was implemented to more accurately describe the containment recirculation pump seal design and operation and to reflect actual plant configuration.

Safety Evaluation

This change is editorial in nature and the operation of the containment recirculation spray pumps is not affected. Therefore, the change is safe and does not constitute an Unreviewed Safety Question.



FSARCR Number  
98-MP3-73

Title  
Containment Bypass Leakage Penetrations Changes

Description of Change

The bypass leakage penetration column of the containment penetrations table was revised to identify additional penetrations which are bypass leakage paths.

Reason for Change

This change was implemented to reflect actual plant configuration and to be consistent with design and licensing documents.

Safety Evaluation

The activity to add new containment bypass leakage path penetrations is consistent with the functions these penetrations and systems perform as evaluated in the current accident analysis. The penetrations are all tested which assures the penetrations will limit leakage from the containment to within licensing and design basis limits. Therefore, the change is safe and does not constitute an Unreviewed Safety Question.

FSARCR Number  
98-MP3-74

Title  
Engineered Safety Features Filter Housing Clarification

Description of Change

The description of the filter housing design was revised to indicate adequate access panels and doors exist for maintenance and testing, even though access doors are not provided on both sides of each bank of components.

Reason for Change

This change was implemented for clarification and to reflect actual plant configuration.

Safety Evaluation

This change is editorial in nature and is consistent with design and licensing documents. Therefore, the change is safe and does not constitute an Unreviewed Safety Question.

FSARCR Number  
98-MP3-76

Title  
Safety Parameters Display System Computer Point Update

Description of Change

The accident monitoring instrumentation list was updated to include two additional computer points to the table for flow to the containment recirculation heat exchangers.

Reason for Change

This change was implemented to reflect actual plant configuration and to be consistent with licensing documents.

Safety Evaluation

This change is editorial in nature and only provides additional non-safety related information. Therefore, the change is safe and does not constitute an Unreviewed Safety Question.



FSARCR Number  
98-MP3-77

Title  
Reactor Coolant System Check Valve Testing  
Clarification

Description of Change

A statement that non-intrusive techniques in the testing program are used to verify closure of normally open reactor coolant system check valves in series was added to the system description.

Reason for Change

This change was implemented to reflect actual testing techniques because some check valves were not provided with means to periodically assess back flow leakage.

Safety Evaluation

This change is editorial in nature because the non-intrusive techniques for verifying check valve closure provide assurance that the check valves are capable of performing their intended safety function. Therefore, the change is safe and does not constitute an Unreviewed Safety Question.

FSARCR Number  
98-MP3-78

Title  
Standby Diesel Generator Fuel Oil System Clarification

Description of Change

A statement was added to the description of the standby diesel generator fuel oil system to clarify that procedural controls and sampling assure that fuel oil quality meets or exceeds the manufacturer's acceptance criteria.

Reason for Change

This change was implemented to reflect actual plant configuration because two of the four fuel forwarding pumps do not have discharge strainers installed.

Safety Evaluation

This change is editorial in nature and current procedures and sampling programs confirm acceptability of the fuel oil quality. Therefore, the change is safe and does not constitute an Unreviewed Safety Question.

FSARCR Number  
98-MP3-79

Title  
Charcoal Adsorber Removal Efficiency Clarification

Description of Change

A clarification was incorporated into the decontamination efficiency description of the auxiliary building filtration system.

Reason for Change

This change was implemented to correct an inconsistency between various licensing documents.

Safety Evaluation

This change is editorial in nature and is consistent with design and licensing documents. Therefore, the change is safe and does not constitute an Unreviewed Safety Question.



FSARCR Number  
98-MP3-80

Title  
Radiation Shielding During Spent Fuel Handling  
Operations

Description of Change

The description of how the dose rate limit at the water level is maintained when moving spent fuel was clarified to state that the water level is maintained above the active fuel rather than the top of the fuel assembly.

Reason for Change

This change was implemented to reflect actual plant configuration based on normal spent fuel pool and refueling cavity water levels and fuel racks/upenders elevations.

Safety Evaluation

This change is editorial in nature and does not change the ability to limit the gamma dose rate from the fuel at the water surface. Therefore, the change is safe and does not constitute an Unreviewed Safety Question.

FSARCR Number  
98-MP3-85

Title  
Emergency Generator Cooling Water Systems Changes

Description of Change

The list of major heat load contributors for each heat exchanger was deleted and replaced with values for the total loads.

Reason for Change

This change was implemented to reflect actual plant configuration and to be consistent with the manufacturer's design documents.

Safety Evaluation

This change is editorial in nature and does not affect the performance or reliability of the heat exchangers. The change accurately represents the diesel generator manufacturer's design heat removal rates and does not make any physical changes to plant equipment or auxiliaries. Therefore, the change is safe and does not constitute an Unreviewed Safety Question.

FSARCR Number  
98-MP3-86

Title  
Radiological Changes and Clarifications

Description of Change

The text, tables, descriptions, and dose guidelines contained in various sections related to radiological design basis and consequences were revised, corrected and clarified.

Reason for Change

This change was implemented to correct a mathematical error, clarify text, and to be consistent with design documents.

Safety Evaluation

This change is editorial in nature and is consistent with design and licensing documents. Therefore, the change is safe and does not constitute an Unreviewed Safety Question.



FSARCR Number  
98-MP3-87

Title  
Accident Monitoring Instrumentation List Changes

Description of Change

The accumulator tank pressure transmitters were removed from the equipment qualification master list and were also identified as being electrical equipment qualified - "no" on the accident monitoring instrumentation list.

Reason for Change

This change was implemented to reflect actual plant configuration with regards to equipment that is environmentally qualified for use inside containment.

Safety Evaluation

This change is editorial in nature and is consistent with environmental qualification requirements for accumulator pressure instrumentation. Therefore, the change is safe and does not constitute an Unreviewed Safety Question.

FSARCR Number  
98-MP3-88

Title  
Environmental Design Conditions Changes

Description of Change

The designation of harsh radiation environment was changed to mild radiation environment for various areas and a note to clarify the multiplication requirement regarding contaminated fluids was added.

Reason for Change

This change was implemented to remove excessive conservatism in the radiation calculation for the engineered safety features building.

Safety Evaluation

This change is editorial in nature and identifies more realistic actual radiation zone values. Therefore, the change is safe and does not constitute an Unreviewed Safety Question.

FSARCR Number  
98-MP3-91

Title  
Table of Three Mile Island Action Items Changes

Description of Change

The table that lists the position and references for the emergency core cooling system component reliability and tracking program was revised to incorporate an accurate description of how the commitment has been satisfied.

Reason for Change

This change was implemented to reflect how the emergency core cooling system component reliability and tracking program commitment is met.

Safety Evaluation

This change is editorial in nature and the intent of the original reliability commitment has been met. Therefore, the change is safe and does not constitute an Unreviewed Safety Question.



FSARCR Number  
98-MP3-94

Title  
Service Water Pump Strainer Motor Switch and Switch  
Escutcheon Plate Change

Description of Change

A portion of the system description was changed to clarify that the service water pump strainer motor is controlled from the main board by an OFF/AUTO/ON switch with indication lights for the associated service water pump strainer backwash valve.

Reason for Change

This change was implemented to reflect actual plant configuration and to be consistent with design drawings.

Safety Evaluation

This change is editorial in nature, and the performance of components involved with this change remains functionally unchanged. Therefore, the change is safe and does not constitute an Unreviewed Safety Question.

FSARCR Number  
98-MP3-96

Title  
Containment Temperature Change

Description of Change

The containment temperatures, during normal operation and during loss of offsite power, were revised and the affected design parameters, fan capacities and heat loads were updated.

Reason for Change

This change was implemented to be consistent with licensing documents and to reflect new calculations and actual fan flow from tests used in the analysis.

Safety Evaluation

This change is editorial in nature and is consistent with design and licensing documents. Therefore, the change is safe and does not constitute an Unreviewed Safety Question.