10 CFR 50.59
Summary Report

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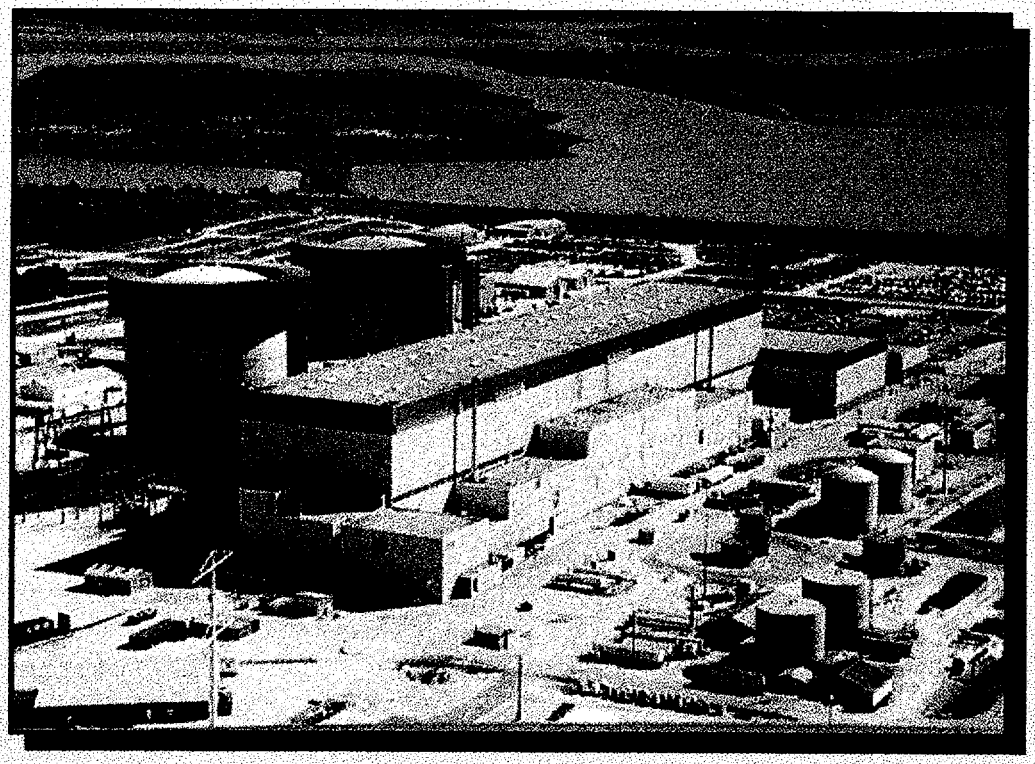

Braidwood Station

NRC Docket Nos. 50-456 and 50-457
June 19, 1998 - June 18, 2000

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DESIGN CHANGE

D20-0-98-330

DESCRIPTION

The purpose of this Designt Change was to eliminate spurious Condensate Polisher (CP) high and low conductivity sump low flow annunciation in the Main Control Room during the Condensate Polishing regeneration cycle, by rewiring the normally open contact of 0FS-PR232 with spare relay contacts on the 0PR41J radiation monitor skid. The flow circuit alarm function was not designed for CP regeneration cycle conditions, and therefore, causes sporadic annunciation during regeneration.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased since the CP System is a non-safety related system which does not interface with any safety significant systems or equipment used to prevent or mitigate a design basis accident as previously evaluated in the UFSAR. The modification is a wiring change to eliminate a nuisance alarm and uses spare contacts form existing relays to accomplish the intended design. No new equipment will be added to the circuit, and the circuit design will not inhibit or jeopardize the intended function of other circuits or equipment.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because the proposed modification has no impact on the intended design function of the radiation monitoring system to detect levels of radiation in the CP sump effluent as described in the SAR. The wiring change is intended to eliminate the nuisance alarm that occurs in the Main Control Room during the CP regeneration cycle. The modification corrects an erroneous alarm function which only occurs during the regeneration mode.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because the review of the CTS, ITS and the ODCM (Chapter 12 Radioactive Effluent Technical Standard) confirms that the margin of safety is not reduced by the proposed modification.

DESIGN CHANGE

D20-0-98-0309

DESCRIPTION

The purpose of this Design Change was to perform the following on the Spent Fuel Pool Bridge Crane: replace the power feed cable take-up reel with a cable carrier track; replace the power feed cable; install a new 12 conductor control cable; install two new junction boxes, and install three new control switches. There were no functional changes made to the bridge crane. Each change relates to the Fuel Transfer Cart Control System.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased since the components installed by this change will not increase the likelihood of dropping or damaging a fuel assembly. Therefore, the probability of this accident will not be increased. Since installation of this change will not affect any of the equipment described in the UFSAR as utilized for activity release mitigation, the consequences of the accident (in terms of off-site dose) will not be increased. The FH System is non-safety related, and does not perform a safety function. Since this change applies to the spent fuel pool bridge crane only, the probability of the malfunction of equipment important to safety will not be increased.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because this change will not increase the probability of dropping or damaging a fuel assembly. UFSAR 15.7.4.2.1 addresses fuel handling accidents inside the spent fuel storage building. The postulated cause of the event is identified as any mechanical failure or operating error which results in the dropping of a fuel assembly into the refueling pool during its transfer from one position in the pool to another. Since this change will not increase the likelihood of a mechanical failure, operating error during fuel assembly transfer, or a design-basis fire, the postulated events as described in the UFSAR and FPR analysis remain bounding and this change will not create accidents not previously evaluated.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because this activity does not affect any parameters upon which Technical Specification are based.

DESIGN CHANGE

D20-1/2-98-308

DESCRIPTION

The purpose of this Design Change was to replace the NMA mixing amplifier cards with NCL Lead/Lag cards in the 7300 Instrumentation and Control System for the control rod speed and direction loop. The purpose was to overcome NMA card electronic drift problems which have caused inadvertent rod movement. The change also includes installing a new computer point which measures the temperature deviation signal which is the input to the control loop.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because the change does not alter the control loop's capability to perform its function and does not introduce any different type of a failure within the control loop.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because the replacement NLL cards are equivalent in design characteristics to the existing NMA cards and do not introduce new interfaces with any components.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because these rod control system changes do not affect any Technical Specifications and the system will operate as designed.

DESIGN CHANGE

D20-1/2-98-309

DESCRIPTION

The purpose of this Design Change was to upgrade fuel transfer cart system in the Fuel Handling (FH) System. This change encompasses 1) Replacement of existing fuel transfer cart control panels with new control panels containing programmable logic controllers, 2) replacement of existing fuel transfer car drive motor with a new winch type drive motor, 3) replacement of existing transfer cart chain drive system with a steel cable drive system, 4) replacement of existing limit switches for the transfer car, fuel upenders and fuel transfer tube gate valves with proximity switches, and 5) addition of transfer cart controls on the refueling machine and the spent fuel pool bridge crane.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased since this change affects the portion of the FH System which handles the fuel assemblies from the point of placing the fuel assembly into the Fuel Handling Building fuel upender (in the transfer canal), transferring the assembly to the reactor building through the fuel transfer tube, and placing the assembly into the reactor building upender. Therefore, this change can not increase the probability of dropping a spent fuel assembly in the spent fuel pool or core. Installation of this change will not affect any of the equipment described in the UFSAR as utilized for activity release mitigation, the consequences of the accident (in terms of off-site dose) will not be increased. The FH System is non-safety related, does not perform a safety function, and is not required to affect, support or maintain the reactor in a safe shutdown condition. This change will not affect any equipment important to safety.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because the intent of this change is to upgrade the fuel transfer cart control and drive system and not increase the likelihood of an electrical, mechanical, or structural failure, or operating error during fuel assembly transfer. This change will upgrade the fuel transfer cart control and drive system. However, the installation of this change will not affect any plant operating modes or accidents. Structural and mechanical design issues have been addressed to maintain seismic and mechanical integrity. Therefore, mechanical and structural failure modes remain unaltered. Electrical failure modes are not altered with the exception of a failure of the Programable Logic Controller (PLC). However, even in the event of a PLC failure, built-in safety features minimize the likelihood of fuel assembly damage. Failure of the PLC is not postulated to result in the dropping of a fuel assembly or a creation of a new type accident.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because this change does not affect any parameters upon which Technical Specifications are based.

MODIFICATION TEST

E20-0-96-301-008-1
E20-0-95-252
E20-0-96-246-4

DESCRIPTION

The purpose of this Modification Test was to test the Auxiliary Building Ventilation (VA) main supply fan, 0VA01CD. This test will verify proper installation on new forged blade assemblies, new inner-fairing cover plate, and modified screen fasteners.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because only existing approved station procedures are used to test the system. The VA System will be tested in an acceptable lineup that is already acceptable per the UFSAR and Technical Specifications.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because this type of testing of the VA System does not have an impact on the events which initiate a Loss of Coolant Accident or a radioactive release accident.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because this activity does not affect any parameters upon which the Technical Specifications are based.

OUT OF SERVICE

OOS 980004617

DESCRIPTION

The purpose of this evaluation was due to a long-term Out of Service (OOS). The OOS was due to a short in Heater 12 of Pressurizer Backup Heater Ground D. The breaker for this heater and its counterparts (11 and 35) will remain OOS (in the "off" position) until Heater 12 can be repaired.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because the proposed activity does not affect any equipment important to safety. The pressurizer safety relief valves and power operated relief valves will not be impacted as a result of the proposed activity. Therefore, the capability of the Pressurizer System to protect the Reactor Coolant System from overpressure conditions is not diminished.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because normal plant operations are not affected and no new equipment failure modes are introduce as a result of this change. The change does not impact the initial conditions of any accidents, and does not change any Technical Specification requirements.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because all Technical Specification requirements will continue to be met.

DOCUMENT CHANGE REQUEST

980534

DESCRIPTION

The purpose of this Document Change Request was to revise the type of valve operators and their "fail" position for the Blowdown Demineralizers Regeneration Waste Strainers Backwash Flush Water Inlet (0WX095A/B/C/D) and Outlet (0WX507A/B/C/D) Valves on drawings M-48 sheets 3A, 3B, 20A and 20B.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because the type and fail position of these valve operators are not a precursor to any accident to affect its probability or important in any accident mitigation. The probability or consequences of a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased due to this change because the valve operators and their fail position do not affect or support any equipment that is important to safety. This change is administrative in nature and is being made to reflect actual plant conditions.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because the valves currently fail closed as the fail safe position. These valves as shown currently on the respective drawings would fail open on the loss of instrument air or electrical power to the associated solenoid valve. The activity is intended to document the fail closed position, as present in the field, as the proper fail position in the respective drawings. This change is administrative in nature and is being made to reflect actual plant conditions.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because this activity does not affect any parameters upon which the Technical Specifications are based.

TEMPORARY PROCEDURE

TP 1BwVS-7580

DESCRIPTION

The purpose of this Temporary Procedure was to determine the amount of flow through the Pressurizer (PZR) Spray Valves and determine the amount of PZR heaters required to operate Unit 1. Unit 1 currently operates with 3 sets of backup heaters due to departure from nuclear boiling (DNB) events while the Unit was ramping up to full power coming out of a refuel outage. While at normal operating temperature and pressure, the requirement to operate all 3 sets of backup heaters is not required. But with the numerous DNB events, Operations feels comfortable with 3 sets of heaters on. This test will insure that in the event one set of backup heaters was to fail the unit will be able to maintain the PZR parameters in a normal condition.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because the protective functions of any of the Pressurizer Setpoints are not being affected by performance of this temporary procedure. This test will only cause minor changes in PZR pressure which will be monitored by a reactor operator. Pressure will be maintained within normal operating limits.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because this test does not adversely impact any systems or functions as previously evaluated in the UFSAR. This test will only cause minor changes in PZR pressure. Pressure will be maintained within normal operating limits.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because the protective functions of any of the Pressurizer Setpoints are not affected by this test.

NUCLEAR WORK REQUEST (NWR)

950052480

DESCRIPTION

The purpose of this Nuclear Work Request was to repair 1FC8779. This work required removing a floor plug for the Spent Fuel Pool demineralizer which has the potential to affect the Auxiliary Building Ventilation (VA) System.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because the new air flowpath has been evaluated and determined that the air flowpath is acceptable and will maintain the Auxiliary Building within acceptable UFSAR and Technical Specification limits. Thus no malfunction of equipment important to safety exists.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because no new assumptions are being made with regard to the reliance on equipment or equipment performance. The removal of the floor plug will not affect the design air flowpath of the VA System. Administrative actions are in place to ensure the air is monitored and properly routed through the HEPA and charcoal adsorber filters if necessary.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because the function of the VA System is not changed by the opening of the floor plug.

EXEMPT CHANGE

E20-2-96-250

DESCRIPTION

The purpose of this Exempt Change was to improve the control characteristics of the Reactor Makeup Control System (RMCS). The RMCS did not provide adequate control over the full range of desired boron concentrations. The exempt change replaced the valve trim of the boric acid flow control valve and changed the controller characteristics for the valve to a pre-positioning control scheme. The new valve trim is a nearly linear trim. The pre-positioning control scheme sets the initial valve demand proportional to the boric acid flow control potentiometer, reducing the time it takes the system to match the desired boric acid flow rate.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased with the installation of this exempt change. The probability of a failure of the valve or controller was not increased by the changes. The system maintains it ability to function as described in the UFSAR for small line breaks. Although the RMCS may be available, the system is not relied upon to meet emergency boration requirements. To meet emergency boration requirements, the Technical Specification require a minimum flow of 30 gpm boric acid solution at a concentration greater than or equal to 7000 ppm (or equivalent). Although the required flow rate of 30 gpm boric acid solution maybe met through valve 2CV110A, the flow path is not credited as a Technical Specification flow path. The emergency boration flow paths through valve 2CV8104 or from the RWST through the 2CV112D and 2CV112E valves are ensured per Technical Specification requirements.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created by the installation of these changes. The failure of valve 2CV110A is addressed in Table 9.3-5 of the UFSAR. The table summarizes the results of a failure mode and effects analysis on the Chemical and Volume Control (CV) System. The table demonstrates that single active component failures do not compromise safe shutdown functions of boration and makeup. The table also demonstrates that single failures occurring during CV System operation do not compromise the ability to prevent or mitigate accidents. The valve is evaluated for both failing open and failing closed. The changes to the valve and controller do not create any additional failure modes to this valve or the system.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced since the changes to the RMCS do not affect any parameters upon which Technical Specifications are based.

MODIFICATION

M20-2-96-001

DESCRIPTION

The purpose of this modification was to replace the existing Safety Related AT&T high specific gravity round cell batteries and racks with C&D LCUN-33 lead calcium batteries and associated racks. The battery chargers will have their float/equalize voltage settings adjusted for the new batteries. Each AT&T battery rack will be replaced with two C&D battery racks. The new two step racks will be placed against opposite walls of the battery rooms. Fire dampers enclosures on the battery room outside walls will be trimmed back to allow for placing the battery racks closer to the outside wall. The battery bank will be separated into two banks, connected with inter-rack connection cabling. The floor area under the presently installed AT&T racks will be repaired, if necessary. Braidwood Station supporting calculations and ELMS-DC will be revised to account for the change in battery operating characteristics and the increased 200-ampere crosstie capability.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because the C&D LCUN-33 batteries and racks have been qualified, for their proposed use, by testing and analysis. The function of the DC System is to provide control power under both normal and emergency conditions. The function of the batteries within the DC System is to provide emergency power to the DC bus in the event of a loss of the 1E battery chargers (the primary source of DC power). This modification does not alter the function of the DC System, therefore the probability of a malfunction of equipment important to safety is not increased.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because the battery chargers will be adjusted to the new float and equalize voltages for the cells. The cabling for the batteries will also be redone. Crosstie capability will be increased to 200 amperes. The consequences of a malfunction of equipment important to safety is not increased because the items being installed are qualified by testing and analysis for the intended function. Crosstie loads do not exceed the capacity of the battery. Cables used are safety related grade. The design basis is met with this change since the new equipment will be capable of performing the intended functions to prevent, mitigate or recover from an accident scenario. Equipment will be seismically mounted.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because while the Division battery is being disconnected and later reconnected, the DC bus will be supported via a crosstie from Unit 1. Crosstie of the units at power during the proposed 8 hour completion time is acceptable. All Technical Specification requirements will be met.

TEMPORARY MODIFICATION

TMOD 98-2-016

DESCRIPTION

The purpose of this Temporary Modification (TMOD) was to provide a source of filtered and dried air to the Instrument Air (IA) loads off header tap 32 from two Service Air (SA) hose drops during refuel outage A2R07 maintenance activities on the Unit 2 Turbine Building IA header.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased since this TMOD maintains the normal operation and safety function of the Diesel Generators as required to support Unit 2 in Modes 5, 6 or defueled. The TMOD provides a reliable source of instrument air during the periods that the Unit 2 IA header is depressurized.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because there is no change in the normal operation of the Diesel Generators created by this TMOD, nor are any new failure mechanisms/modes created by it's installation. The TMOD does not change any initiating event or condition for the evaluated accidents. The Diesel Generators remain a reliable source of emergency power to mitigate the consequences of any accident.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because this activity does not change any parameters upon which Technical Speicifications are based.

SPECIAL PROCESS PROCEDURE

SPP 99-002

DESCRIPTION

The purpose of this Special Process Procedure was to introduce insignificant amounts of air inleakage through the main condenser vacuum pressure sensing lines. The air flow was to continuously purge the sensing lines improving the accuracy of the Condenser Vacuum indication.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because the amount of air inleakage introduced will not affect the overall condenser vacuum.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because, a loss of condenser vacuum event is evaluated by the UFSAR. The amount of air introduced was insignificant and was well within the capacity of the Steam Jet Air Ejectors.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because no Technical Specifications are affected by this test. The turbine trip signal based on low condenser vacuum was not affected by this test.

DOCUMENT CHANGE REQUEST

990020

DESCRIPTION

The purpose of this Document Change Request (DCR) was to add Equipment Piece Number (EPN) designators for the Pressurizer Relief Tank rupture discs to drawing M-60-6 and M-135-6.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because the addition of the EPN designators to drawing has no impact on any equipment in the plant. This is an administrative change only to update the drawings.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because normal plant operations are not affected and no new equipment failure modes are introduced as a result of this change. The change does not impact the initial conditions of any accidents, and does not change any Technical Specifications. This is an administrative change only to update the drawings.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because the change does not affect any parameters upon which the Technical Specifications are based.

TEMPORARY MODIFICATION

TMOD 99-0-001

DESCRIPTION

The purpose of this Temporary Modification was to install a temporary barrier to support the removal and replacement of Door D-325 under Work Request 980034830. Door D-325 is the Turbine to Auxiliary Building equipment door. The temporary barrier is designed to protect against the effects of a high energy line break (HELB) while maintaining Auxiliary Building negative pressure requirements as contained in Technical Specifications during the work activities.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because this TMOD maintains the HVAC, HELB, and security function of Door D-325. The TMOD provides a reliable and qualified barrier to support the work activities in any mode.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because there is no change in the HVAC, HELB, or security function of Door D-325 created by this TMOD, nor are any new failure mechanism/modes created by the installation. The TMOD does not change any initiating event or condition for the evaluated accidents. The temporary barrier remains a reliable Turbine to Auxiliary Building boundary and does not affect the consequences of any accident.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because this activity does not affect any parameters upon which the Technical Specifications are based.

UFSAR REVISION

UFSAR Draft Revision Package 8-021

DESCRIPTION

The purpose of this UFSAR Revision was to eliminate a periodic bypass leakage test of the containment charcoal recirculation units. The containment charcoal filter units are to be leak tested periodically per Regulatory Guide 1.140. Industry Standard ANSI N510-1980 allows a visual inspection, pressure drop determination and laboratory testing to be performed in place of bypass leakage testing for 100% recirculating units located within containment.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased since the affected systems are not related to the sequence of events leading to the initiation of an accident and is not relied upon to mitigate the consequences of an accident.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created since no physical changes or operational changes were made to the ventilation system. This activity was related to the testing method utilized only and no changes to the actual filter housing, filter, or absorbers were made. The change to the periodic test is only reflected in surveillance procedures associated with the ventilation systems.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced since off-site doses will continue to be maintained in accordance within the acceptable limits of the Off Site Dose Calculation Manual to ensure conformance to the CFR requirements. This activity does not affect any parameters upon which the Technical Specifications are based.

NUCLEAR WORK REQUEST (NWR)

980064861

DESCRIPTION

The purpose of this Nuclear Work Request was to support a nitrogen freeze seal repair in the B Essential Service Water (SX) System pump room. As part of this repair, doors would have to be propped open to allow routing of hoses through the door.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because the probability of creating an initiating event of Loss of Offsite Power, Loss of Coolant Accident (LOCA) or High Energy Line Break is not affected. Also, opening the doors will not affect any safety related equipment from a ventilation boundary perspective. The Auxiliary Building Ventilation (VA) System will still meet in its intended functions, thus all other safety related equipment will not be affected from ventilation concerns. The airflow path essentially remains unchanged, thus VA will continue to function as before and the offsite dose analysis remains the bounding analysis.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because this action does not have an impact on the events which initiate a LOCA or a radioactive release accident. This is no increase in the consequences of an equipment malfunction since no new assumptions are being made with regard to the reliance on equipment or equipment performance.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because the change does not affect any temperature or differential pressure requirements in the Technical Specifications.

ENGINEERING REQUEST

9802235

DESCRIPTION

The purpose of this Engineering Request was to address the addition of temporary lead shield on line 2CV01E-3" to reduce the general area dose in the Unit 2 Curved Wall Area. The lead was installed while the line was still considered operable.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased by the installation of temporary lead shielding on line 2CV01E-3". The affected Structures, Systems and Components (SSCs) have been evaluated and qualified for the installation of the temporary lead shielding. The evaluation of the piping included a check for high energy line break locations. The evaluation concluded that pipe stresses with the lead installed continue to meet the requirements of NUREG-0800. Therefore, no new lines breaks were required to be postulated. The letdown piping contains contaminated primary coolant. The installation of the lead would not impact the ability of the piping to contain the contaminated fluid. In addition, no other SSCs which were relied upon to maintain offsite dose at acceptable limits or mitigate the consequences of this accident were affected by the change. The probability of a malfunction of the letdown piping was unaffected by the addition of the temporary lead shielding. The affected SSCs had been qualified for all design loads with the lead shielding installed. In addition, no other equipment important to safety was affected by the temporary installation of lead shielding.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created by the installation of the temporary lead shielding. The affected SSCs had been qualified for the effects of the additional weight, including the effects of a Safe Shutdown Earthquake (SSE). The shielding was secured to the pipe to prevent the shielding from becoming dislodged during a seismic event. The shielding was installed per approved Station procedures. The limitations and actions listed in the procedure ensured that the affected SSCs would continue to operate as designed.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because this activity does not affect any parameters upon which the Technical Specifications are based.

DOCUMENT CHANGE REQUEST

980521
980522

DESCRIPTION

The purpose of these Document Change Requests (DCRs) was to change the normal position indication on the P&ID to reflect actual plant conditions. Station approved procedures list 0AB131 as Open. The P&ID and the figure in the UFSAR show the normal position as Closed. Station approved procedures list 0AB8251 as Closed. The P&ID and the figure in the UFSAR show the normal position as Open. Station approved procedures list 0AB8232B as Open. The P&ID and the figure in the UFSAR show the normal position as Closed.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased since these valves do not affect the function of the Boric Acid (AB) System. The requested change is to change the P&ID and the figures in the UFSAR to show actual plant conditions.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because this portion of the AB System is used to remove the excess effluents from the recycle hold-up tanks to the recycle monitor tanks. The effluents are processed and release. This is an administrative change only to ensure the drawings reflect actual plant conditions.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because the function of the AB System, which provides reactivity control, is not changed by the change to the drawings. This activity does not affect any parameters upon which the Technical Specifications are based.

DOCUMENT CHANGE REQUEST

990023

DESCRIPTION

The purpose of this Document Change Request (DCR) was to show the vendor filter inlet valve (0WX1120) as Closed rather than Open during normal at power plant operation on drawing M-48 sheet 1.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because the position of this valve is not a precursor to any accident to affect its probability or important in any accident mitigation. The probability or consequences of a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased due to this change because the subject valve does not affect or support any equipment that is important to safety.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because water from the turbine building drain systems is normally treated in the wastewater treatment plant for discharge. In the event of excessive leakage of the primary coolant into the secondary system, the contaminated water may be processed through the coalescer/carbon filters and through additional filtration (the subject vendor filter) as needed and discharged via the release tanks. The proposed activity will isolate the additional filtration (vendor filter). As long as the turbine building drain systems remain uncontaminated, the flowpath through the filter will likely remain isolated. In the event the turbine building drain system(s) become contaminated, and it is desirable to use the additional filtration,, then procedural controls will be used to open the flowpath through the filter. In either case, the systems/functions affected by this change will not be adversely affected and station release limits will continue to be maintained.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because this change does not affect any parameters upon which the Technical Specifications are based.

TEMPORARY SHIELDING REQUEST

TSR 99-031

DESCRIPTION

The purpose of this Temporary Shielding Request was to install temporary lead shielding on line 1CV01FA-3" to reduce the radiation dose near the 1B Letdown Heat Exchanger for maintenance work.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased by the installation of temporary lead shielding on line 2CV01E-3". The affected Structures, Systems and Components (SSCs) have been evaluated and qualified for the installation of the temporary lead shielding. The evaluation of the piping included a check for high energy line break locations. The evaluation concluded that pipe stresses with the lead installed continue to meet the requirements of NUREG-0800. Therefore, no new lines breaks were required to be postulated. The letdown piping contains contaminated primary coolant. The installation of the lead would not impact the ability of the piping to contain the contaminated fluid. In addition, no other SSCs which were relied upon to maintain offsite dose at acceptable limits or mitigate the consequences of this accident were affected by the change. The probability of a malfunction of the letdown piping was unaffected by the addition of the temporary lead shielding. The affected SSCs had been qualified for all design loads with the lead shielding installed. In addition, no other equipment important to safety was affected by the temporary installation of lead shielding.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created by the installation of the temporary lead shielding. The affected SSCs had been qualified for the effects of the additional weight, including the effects of a Safe Shutdown Earthquake (SSE). The shielding was secured to the pipe to prevent the shielding from becoming dislodged during a seismic event. The shielding was installed per approved Station procedures. The limitations and actions listed in the procedure ensured that the affected SSCs would continue to operate as designed.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because this activity does not affect any parameters upon which the Technical Specifications are based.

COMMITMENT CHANGE

456-130-98-3.8.1.1-200

DESCRIPTION

Current Technical Specification (CTS) surveillance requirement 4.8.1.1.2.f.7 required verification of the Diesel Generators ability to start and achieve rated speed and voltage within 10 seconds prior to initiating the full load endurance testing. During the Station's conversion to Improved Technical Specifications (ITS), this requirement was relocated out of Technical Specifications and ultimately was relocated to Station procedures. NRC commitment 456-130-98-3.8.1.1-0200 was created to track this requirement and ensure this item could not be modified without appropriate 50.59 review. The purpose of this Commitment Change was to delete this timing requirement from Diesel Generator Load and Endurance Testing.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because the changes to the surveillance testing do not negatively affect or impact the Diesel Generator reliability or the ability to function as required to mitigate the consequences of the affected accidents. Diesel Generator functionality and its ability to attain rated speed and voltage within ten seconds is verified through numerous other Technical Specification surveillance requirements. This change will ultimately enhance long term Diesel Generator reliability.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because the changes do not introduce any new operational limitations for the affected engine subsystems, nor do they challenge the availability of the Diesel Generators. A complete malfunction of a Diesel Generator, which results in the loss of a single train to mitigate the consequences of an accident, is the most limiting failure considered for a Diesel Generator. All Diesel Generators remain reliable sources of emergency power and no new failure mechanisms are introduced by the changes being made to the testing methodology. There is no possibility that this change can create an accident or malfunction different from those currently evaluated in the UFSAR.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because the change does not affect any parameters upon which Technical Specifications are based. The NRC approved of relocating certain CTS specifications and details to the TRM in its SER of Braidwood TS Amendment 98, dated 12/22/98. Upon implementation of the ITS, these details are no longer applicable as Technical Specificaiton requirements. Consequently, the changes do not affect any parameters upon which the Technical Specifications are based.

DOCUMENT CHANGE REQUEST

990033

DESCRIPTION

The purpose of this Document Change Request (DCR) was to change the normal lineup position of the Auxiliary Feedwater (AF) tell tale drain isolation valves from Open to Throttled. The isolation valve is upstream of a tell tale drain located between two normally closed motor operated valves that isolate the AF Pump suction from the Essential Service Water System (SX). The SX System is the safety related backup water source for the AF System. Its normal source is the non-safety related Condensate Storage Tank (CST). The space between the two motor operated valves is normally empty and the tell tale drain is used to indicate valve leak by. Leak by is of concern since leakage of SX lake water into the Condensate System could impact secondary side water chemistry.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because the position of the tell tale drain isolation valves does not impact any equipment whose failure will cause an AF System actuation. The ability of the AF System to respond to an accident is actually improved by throttling the valve(s). There will be less water lost/spilled when the AF Pump suction switches over to SX and there will be less input to the Auxiliary Building Floor Drain System which collects the tell tale drain flow.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because in the absence of any leakby past the motor operated valves, there is no impact of having the tell tale drain isolation valve throttled. If a motor operated isolation valve should leak by, the tell tale drain will still function but at a reduced capacity. In the event that the tell tale drain fills with water, the drain isolation valve can still be opened further. Any cross contamination between the SX System and Condensate System will be detected in secondary water samples.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because the change in position of the tell tale drain isolation valve does not affect any parameters upon which Technical Specifications are based.

NUCLEAR WORK REQUEST (NWR)

980040952

DESCRIPTION

The purpose of this Nuclear Work Request was to perform work in the Unit 2 containment chiller room. This work requires propping open Door D-306 to allow routing of hoses through the door. Opening this door affects the Auxiliary Building Ventilation (VA) System.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because the accident mitigation function and normal functions of the VA System will still continue to maintain the building at a negative pressure, control post accident radioactivity leaking from the ECCS equipment within required limits, and maintain environmental qualification zone requirements for the affected areas.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because the Auxiliary Building Ventilation System and door D-306 is unrelated to the sequence of events leading to the initiation of an accident. Since the system's accident mitigation and normal functions will be maintained, the possibility of an accident or malfunction of a different type from those evaluated in the SAR is not created.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because this change does not effect the Technical Specifications. There are no Technical Specification differential pressure or temperature limits for these areas.

PROCEDURE REVISION

BwVS VP-2

DESCRIPTION

The purpose of this Procedure Revision was to reflect the periodical in place bypass leakage test of the containment charcoal recirculation units. The containment charcoal filter units are to be leak tested periodically per Regulatory Guide 1.140. Industry Standard ANSI N510-1980 allows a visual inspection, pressure drop determination and laboratory testing to be performed in place of bypass leakage testing for 100% recirculating units located within containment. This revision also included the change from standard RTD M16-1T to ASTM D3803-1989.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because the affected systems are not related to the sequence of events leading to the initiation of an accident and are not relied upon to mitigate the consequences of an accident.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because changing the periodic testing requirements will not adversely impact systems or functions so as to create the possibility of an accident or malfunction of a type different from those evaluated in the SAR since no physical changes or operational changes will be made to the ventilation system. The filter system will be tested to industry accepted testing methods. No physical changes to the filter housings, filters, or adsorbers will be made. The change to the periodic test is only reflected in surveillance procedures associated with the ventilation systems.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because this activity does not affect any parameters upon which the Technical Specifications are based. Off-site doses will continue to be maintained in accordance within the acceptable limits of the Off Site Dose Calculation Manual to ensure conformance to the CFR requirements.

PROCEDURE REVISION

BwVS OG-2
BwVS VW-3

DESCRIPTION

The purpose of these Procedure Revisions was to delete the procedures associated with charcoal sample analysis from the Main Condenser Off-Gas Ventilation Exhaust Treatment System and Volume Reduction Charcoal Filter System.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because the system/equipment is not related to the sequence of events leading to the initiation of any accident and is not relied upon to mitigate the consequences of any accident.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because the systems are designed for use during normal operation of the plant. The Main Condenser Off-Gas Ventilation Exhaust Treatment System is designed for use with steam generator tube leakage. The Volume Reduction Charcoal Filter System is for use with the Volume Reduction System.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because off-site dose will continue to be maintained in accordance with the acceptable limits of the Off Site Dose Calculation Manual to ensure conformance to the applicable CFR requirements. This activity does not affect any parameters upon which the Technical Specifications are based.

SPECIAL PROCESS PROCEDURE

SPP 99-003
SPP 99-004

DESCRIPTION

The purpose of these Special Process Procedures was to stroke the 2SI8809B and 2RH8716A valves in the Residual Heat Removal System under differential pressure and conditions. Valve Operational Test and Evaluation System (VOTES) equipment was used to monitor valve and system operating parameters while the tested valves were being stroked. A system flowpath was set up which drew water from the RCS hot legs and discharged to the RCS cold legs or the hot legs. Temporary pressure test gauges were installed to measures system operating pressures and the auto circuitry for the miniflow isolation valve was temporarily disabled by the lifting of electrical leads.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because the RHR System is being operated in accordance with normal operating procedures and practice. The special procedure is being performed when the tested train of RHR is not required to be operable for any required function. The proposed activity will not increase the probability of a malfunction of equipment important to safety. The test procedures are operating the RHR system in accordance with design requirements and determining that the tested components properly function.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because the special procedure opens and closes the tested valve under differential pressure and flow at design conditions when the system is not required to be operational.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because the special process procedure operates the RHR System as it would normally be operated under accident conditions. The system is not required to be operable during the time when it is being used for testing.

ENGINEERING REQUEST

ER 9801886

DESCRIPTION

The purpose of this Engineering Request was to addresses maintenance work on 2B Chemical and Volume Control (CV) System Centrifugal Charging Pump room cubicle cooler. The cooler will be isolated from the Essential Service Water (SX) System for maintenance by closing valves 2SX2014C and 2SX2161C. In the event that the valves leak by, ER 9801886 evaluates the temporary installation of freeze seals on lines 2SX04FC-2" & 2SX05BB-3". These lines are the SX supply and return lines for the 2B CV Pump room cubicle cooler. The cubicle cooler and 2B CV Pump (2CV01PB) will be Out-Of-Service.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because the freeze seals will be established and controlled in accordance with approved Station procedures. The use of freeze seals are a common and proven industry practice. The affected piping has been found to remain seismically qualified with the additional weight of the freeze seal assembly. A failure of the freeze seals on the SX piping would not initiate nor alter the initial conditions to any of the accidents or malfunctions of equipment. Leakage from a freeze seal failure during this time would be minimal and bounded by the existing flooding analysis in calculation 3C8-0685-002, Flood Zone S3-13B.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because the freeze seals will be established and controlled in accordance with approved Station procedures. The use of freeze seals are a common and proven industry practice. The affected piping has been found to remain seismically qualified with the additional weight of the freeze seal assembly. A failure of the freeze seals on the SX piping would not initiate nor alter the initial conditions to any of the accidents or malfunctions of equipment. Blank flanges will also be installed to minimize the chances of any leakage, should the freeze seals fail. Leakage from a freeze seal failure during this time would be minimal and bounded by the existing flooding analysis in calculation 3C8-0685-002, Flood Zone S3-13B.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because the freeze seals have the same affect on plant equipment as closing the isolation valves to the room cubicle coolers during maintenance activities. The margin of safety for the SX System is not reduced. Technical Specification requirements will continue to be met during this activity.

TECHNICAL REQUIREMENTS MANUAL

TRM Revision 1

DESCRIPTION

The purpose of this revision of the Technical Requirements Manual (TRM) was to revise Note 2 of TRM Surveillance Requirement (TSR) 2.7.a.1 to delete reference to Mode 4. Note 2 has been revised to state that the Surveillance is required to be met in Modes 1, 2, and 3 consistent with Current Technical Specification (CTS) Surveillance Requirement (SR) 4.7.1.2.3.c.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because no operational changes were made to the system, no configuration changes are involved, and the revised applicability will ensure that the required surveillances are within frequency during the time the Auxiliary Feedwater (AF) System is required to operate. Therefore, the probability of occurrence of the consequences of an accident or a malfunction of equipment important to safety is not increased.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because restoring the original intent of CTS SR 4.7.1.2.3.c demonstrates operability of the 1B AF Pump when required (i.e. during the Mode of Applicability). The change does not involve any physical changes to plant systems, structures, or components (SSC) and does not affect intended system operation. Consequently, systems or functions are not affected so as to create the possibility of an accident or malfunction of a different type than previously evaluated.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because the NRC approved of relocating CTS SR 4.7.1.2.3.c to the TRM (during the conversion to Improved Technical Specifications) in its SER of Braidwood TS Amendment 98, dated 12-22-98. Use of the TRM is effective upon implementation of TS Amendment 98. Consequently, there are no Technical Specifications affected by restoring the original intent of CTS SR 4.7.1.2.3.c.

NUCLEAR WORK REQUEST (NWR)

970111599

DESCRIPTION

The purpose of this Nuclear Work Request was perform work in the B Essential Service Water (SX) Pump room involving a freeze seal. To perform this work, Doors D-226, D-234 and SD-157 had to be propped open to allow the routing of hoses. These doors are considered to be part of the ventilation boundary.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because the probability of creating an initiating event of Loss of Offsite Power, Loss of Coolant Accident (LOCA), or High energy Line Break is not affected. Also, opening the doors will not affect any safety related equipment from a ventilation boundary perspective. The Auxiliary Building Ventilation (VA) System will still meet its intended function, thus all other safety related equipment will not be affected from ventilation concerns. The airflow path essentially remains unchanged, thus VA will continue to function as before and the offsite dose analysis remains the bounding analysis.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because this action does not have an impact on the events which initiate a LOCA or a radioactive release accident.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because this activity does not affect any parameters upon which the Technical Specifications are based.

DOCUMENT CHANGE REQUEST

DCR 990041

DESCRIPTION

The purpose of this Document Change Request (DCR) was to revise architectural drawing A-831 to provide clarifying information related to the microwave oven currently installed/used in the Technical Support Center (TSC) kitchen. Note 5 on this drawing is revised to indicate that the microwave oven is an under the cabinet mounted unit with no specific reference to manufacturer. Drawing A-831 is reflected in the UFSAR as Figure E.75-1.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because this DCR is only editorial in nature. No physical plan changes are incorporated by the revision to drawing A-831. Therefore, this DCR does not change any initiating conditions or create failure modes which would impact the probability of occurrence or consequences of accidents evaluated in the SAR. This change is administrative in nature to have the drawing reflect actual plant conditions.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because the microwave oven in the TSC does not perform any function related to physical plant operations and cannot create any new equipment failure modes. This DCR does not have any impact on Station equipment or interfacing systems which could introduce an accident or malfunction different than currently evaluated in the SAR. This change is administrative in nature to have the drawing reflect actual plant conditions.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because this activity does not change any parameters upon which Technical Specifications are based.

DESIGN CHANGE

D20-0-96-282-004

DESCRIPTION

The purpose of this Design Change was to replace the existing Westinghouse type AR3 relays with Westinghouse type MME10-10 DC contactors in the breaker closing control circuits for the Auxiliary Building Ventilation (VA) System exhaust fans (0VA02CA, 0VA02CB, 0VA02CC, and 0VA02CD).

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because failure of the affected VA exhuast fan to start is not an accident initiator for any of the accidents evaluated in UFSAR 15.0-15.8. Failure of a VA exhaust fan is addressed in Table 9.4-10. Failure of the affected 4160V ESF bus due to existing AR3 relay failure is not an existing postulated accident initiator. Nor is the failure of the ESF bus due to a new DC contactor failure considered a credible postulated accident initiator.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because these changes do not: 1) alter any SSCs as described in the UFSAR, 2) result in a revision to the UFSAR, 3) impact any UFSAR wording, numbers, drawings, tables, or figures, 4) alter the function of the Auxiliary Power (AP) or VA System or components during any plant operating modes, 5) alter any initial conditions or assumptions used in UFSAR accident analyses, 6) create any new failure modes, or 7) increase the probability of dropping or damaging a fuel assembly. Therefore, the proposed changes will not create the possibility of an accident or transient different than those previously evaluated in the UFSAR.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because this activity does not affect any parameters upon which the Technical Specifications are based.

ENGINEERING REQUEST

ER 9801904

DESCRIPTION

The purpose of this Engineering Request was to install freeze seals on the Essential Service Water System (SX) supply and return lines to the 2B (diesel driven) Auxiliary Feedwater (AF) Pump room cubicle cooler.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because the freeze seals have the same affect on the plant equipment as closing the SX isolation valves to the room cubicle cooler. The additional weight is qualified, flooding was evaluated and is not a concern, and there is no effect on overall SX System flow. The SX System is also not a radiological barrier. The work will be performed when the 2B AF Pump is not required (Modes 5, 6, or defueled).

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because the freeze seals have the same affect on the plant equipment as closing the SX isolation valves to the room cubicle cooler. The additional weight is qualified, flooding was evaluated and is not a concern, and there is no effect on overall SX System flow. The work will be performed when the 2B AF Pump is not required (Modes 5, 6, or defueled).

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because there is no impact on the SX System requirements (for Modes 5, 6, and defueled) that would reduce its margin of safety from the installation of these freeze seals.

TEMPORARY MODIFICATION

99-1-007

DESCRIPTION

The purpose of this Temporary Modification (TMOD) was to install a blank off plate in place of the recirc orifice for the 1B Blowdown Condenser Hotwell Pump. This TMOD permits maintenance on the 1B Blowdown Condenser Hotwell Pump without affecting the operation or availability of the 1A Pump.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because this TMOD provides a mechanism to perform maintenance on one train of equipment while maintaining the opposite train available for use. The design of the TMOD does not introduce any new failure mechanisms or modes for the installed or interfacing equipment. The affected equipment is not relied upon during accident operations.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because design considerations such material compatibility, weight/seismic effects, and bolting are incorporated in the installation of the blank off plate. These design considerations prevent any impact on Station equipment or interfacing systems to ensure that no new failure mechanism or mode is created which could introduce an accident or malfunction than currently evaluated in the SAR.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because this activity does not affect any parameters upon which the Technical Specifications are based.

TEMPORARY MODIFICATION

TMOD 99-2-004

DESCRIPTION

The purpose of this Temporary Modification (TMOD) was to install three diesel air compressors and two aftercoolers as back-up supplies of compressed air during maintenance activities on the Unit 1 and Unit 2 Station Air Compressors.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because this TMOD provides a reliable back-up source of compressed air during maintenance activities on the Unit 1 and Unit 2 Station Air Compressors and will only be used under emergency conditions. The design of the TMOD does not introduce any new failure mechanisms or modes for the installed Service Air System. The installation in itself cannot cause a loss of instrument air or alter the response of Station equipment as a result of a loss of instrument air.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because design considerations such as compressor location, hose routing, temporary power sources, and catastrophic failure conditions were incorporated in the installation of the temporary air compressors. These design considerations prevent any impact on Station equipment or interfacing systems to ensure that no new failure mechanism or mode is created which could introduce an accident or malfunction than currently evaluated in the SAR.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because this TMOD does not change any parameters upon which Technical Specifications are based.

TEMPORARY MODIFICATION

99-2-005

DESCRIPTION

The purpose of this Temporary Modification (TMOD) was to disconnect the inlet and outlet lines to the 2A Containment Chiller to install blank flanges. This isolated the chiller from the Essential Service Water (SX) System and allowed the return of the remaining SX piping to service.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because the SX piping was restored to an operable status so it can perform its design function. A Containment Chiller is not an accident initiator and is not used to mitigate the consequences of an accident.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because no new equipment was added to the plant. The Containment Chiller was isolated for maintenance and the SX System was restored to an operable status. No other equipment important to safety was affected by this activity.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because this activity does not affect any parameters upon which the Technical Specifications are based.

DOCUMENT CHANGE REQUEST

DCR 990027

DESCRIPTION

The purpose of this Document Change Request (DCR) was to correct drawing discrepancies identified in UFSAR Figure 9.2-15, sheets 1 and 2 and P&IDs M39-1 and M124-1 to show the installation of valve 1CD180 and the normal position of 2CD180.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased since valve 1CD180 will be fully capable of maintaining the non-safety related Condensate (CD) System pressure boundary to support CD System operation and 2CD180 is being shown in it's normal line up position of closed. The CD System is not assumed to be functional during/after an accident. This is an administrative change to have the drawings reflect actual plant conditions.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because 1CD180 is a manual valve and does not affect the function of the CD System during normal or accident conditions. The CD System is not assumed to be functional during/after an accident. This is an administrative change to have the drawings reflect actual plant conditions.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because the function of the CD System is not changed by the addition of the manual valve 1CD180. This activity does not affect any parameters upon which the Technical Specifications are based.

TECHNICAL REQUIRMENTS MANUAL

TRM Revision D

DESCRIPTION

The purpose of this TRM Revision was to document changes to the Current Technical Specifications (CTS) that were relocated to the TRM during the conversion to Improved Technical Specification (ITS), specifically the "less restrictive" changes associated with TRM Section 3.1, "Reactivity Control Systems".

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because the proposed changes are less restrictive. However, for each less restrictive change, it was determined that either the same change was approved and implemented in ITS or the proposed change did not impact any accident analysis. Furthermore, the proposed changes do not involve any physical changes to plant systems, structures, or components (SSCs), or decrease the level of safety to which these SSCs are operated and maintained. Consequently, the probability of occurrence or the consequences of an accident or a malfunction of equipment important to safety is not increased.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because the changes do not involve any physical changes to plant systems, structured, or components (SSCs), or decrease the level of safety to which these SSCs are operated and maintained. Consequently, the probability of occurrence or the consequences of an accident or a malfunction of equipment important to safety is not increased.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because the NRC approved of relocating certain CTS specifications and details to the TRM in its SER of Braidwood TS Amendment 98, dated 12/22/98. Upon implementation of the ITS, these details are no longer applicable as TS requirements. Consequently, the changes do not affect any parameters upon which the Technical Specifications are based.

TECHNICAL REQUIREMENTS MANUAL

TRM Revision A, B, D, E, 1

DESCRIPTION

The purpose of this TRM Revision was to justify relocating certain details associated with the method for determining an allowed increase in the trip setpoint for the Containment Radiation Monitor during containment purge or vent operations to the Offsite Dose Calculation Manual (ODCM). The proposed activity subsequently relocates these details to the TRM during the conversion to Improved Technical Specifications.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because there are no accidents or transients affected by the relocation of certain information from the ODCM to the TRM. Relocating details associated with the adjustment of the trip setpoint during purge and vent operations from the ODCM to the TRM will have no affect on system or plant operation. The Containment Area Radiation Monitors will continue to function as described in the UFSAR. Therefore, the probability of occurrence or the consequences of an accident or a malfunction of equipment important to safety is not increased.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because relocating details associated with the adjustment of the trip setpoint during purge and vent operations from the ODCM to the TRM will have no affect on system or plant operation. The Containment Area Radiation Monitors will continue to function as described in the UFSAR. Therefore, the possibility of an accident or malfunction of a different type than any previously evaluated is not created.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because the NRC approved of relocating certain details associated with the method for determining an allowed increase in the trip setpoint for the Containment Radiation Monitor during containment purge or vent operations to the ODCM in its SER of Braidwood TS Amendment 98, dated 12/22/98. Upon implementation of the ITS, these details are no longer applicable as TS requirements. Consequently, there are no Technical Specifications affected by subsequently relocating this information to the TRM.

TEMPORARY MODIFICATION

99-1-006

DESCRIPTION

The purpose of this Temporary Modification (TMOD) was to remove priming valves on the vent lines from the Unit 1 Main Condenser inlet waterboxes. The specific valves are 1OG02MA, MB, MG, and MH. A 90 degree flanged elbow is installed on the inlet mating flange to the valves. Additionally, priming valve 1OG02ME must be removed to facilitate access to valve1OG02MB. Blind flanges are installed on the outlet of the added elbows and on the mating flange to the inlet of valve 1OG02ME. These changes are required to support the chemical cleaning of the Circulating Water side of the Main Condenser tubes.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because the priming valves on the inlet waterboxes to the Main Condenser are not initiators for any accident and do not function to mitigate the consequences of any accident.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because the vent lines priming valves are not required to continuously vent the inlet waterboxes. The priming tanks on the outlet waterboxes adequately vent the Circulating Water boxes and tubes. The tubes are higher on the outlet waterbox allowing flow to collect all the air at the outlet waterbox. The present condition of the priming valves is isolated in place and no adverse effect has resulted on the operation of the Main Condenser.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because this activity does not affect any parameters upon which the Technical Specifications are based.

ENGINEERING REQUEST

ER 9801693

DESCRIPTION

The purpose of this Engineering Request was to install freeze seals on the Essential Service Water (SX) supply and return lines to the Unit 2 Chemical and Volume Control System (CV) Positive Displacement Pump room cubicle cooler to repair valves 2SX2084 and 2SX2085.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because the freeze seals have the same affect on the plant equipment as closing the SX isolation valves to the room cubicle cooler. The additional weight and flooring were evaluated and are not a concern, and there is no effect on overall SX System flow. The SX System is also not a radiological barrier. The work will be performed when the Unit 2 CV Positive Displacement Pump is Out-of-Service.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because the freeze seals have the same affect on the plant equipment as closing the SX isolation valves to the room cubicle cooler. The additional weight and flooring were evaluated and are not a concern, and there is no effect on overall SX System flow. The work will be performed when the Unit 2 CV Positive Displacement Pump is Out-Of-Service.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because there is no impact on the SX System that would reduce its margin of safety with the installation of these freeze seals. The Unit 2 ECCS "B" train systems shall be operable to meet Technical Specification requirements.

DESIGN CHANGE

D20-1-98-229

DESCRIPTION

The purpose of this Design Change was remove the control switch "STP" contact from the auto-start circuit to assure that the 1B Auxiliary Feedwater (AF) Pump will auto-start under all required conditions.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because the change does not alter the pump's capability to perform its function and does not introduce any different type of a failure within the control circuit.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because the system is designed as an accident mitigation system. The system function is not altered by the change.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because the capability of the system to perform its function is not reduced.

NUCLEAR WORK REQUEST (NWR)

990004358

DESCRIPTION

The purpose of this Work Request was to install and remove a linestop at the Lake Screen House (LSH). The linestop will be installed in the Non-Essential Service Water System (WS) to allow removal of a WS strainer butterfly isolation valve (0WS003C).

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because the WS System is not required to mitigate any UFSAR related accidents. Additionally, the WS System does not initiate or alter the initial conditions of any accidents. During linestopping, the stopple becomes part of the WS pressure boundary. Considering that this a proven linestopping method, loss of WS pressure is highly unlikely. Loss of WS will not prevent the safe shutdown of the plant since no safety related loads are served by this system.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because linestopping activities do no adversely interact or interface with any equipment important to safety in a manner that degrades their design margins. Therefore, these activities do not create the possibility of a different type of malfunction of equipment important to safety previously evaluated. This activity is being performed on the WS System and will not impact the Essential Service Water System.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because this activity does not affect any parameters or components upon which the Technical Specifications are based.

DESIGN CHANGE

D20-1-98-214-001
D20-1-98-214-002

DESCRIPTION

The purpose of these Design Changes was to eliminate the Diesel Generator pneumatic and electrical vibration trip functions, which are currently bypassed in the emergency mode of operation. This included removing the acceleration sensing valve, capping the appropriate sensing lines and disconnecting the trip and annunciator alarm contacts. The existing trip function was removed to eliminate nuisance tripping of the Diesel Generators during testing.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because the design change does not affect the capability of the Diesel Generator to perform its emergency function. The availability and reliability of the Diesel Generator will be the same or better after the change.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because no new failure modes have been introduced by removing the vibration trip function.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because this activity does not affect any parameters upon which the Technical Specifications are based.

NUCLEAR WORK REQUEST (NWR)

970131773

DESCRIPTION

The purpose of this Nuclear Work Request was to perform work in the Unit 2 Containment Chiller room. To perform this work, Door D-306 was required to be propped open to allow the routing of hoses. This door is considered to be part of the ventilation boundary.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because since the accident mitigation function and normal functions of the Auxiliary Building Ventilation (VA) System will still continue to maintain the building at a negative pressure, control post accident radioactivity leaking from the ECCS equipment within required limits, and maintain environmental qualification zone requirements for the affected areas.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because due to the Auxiliary Building Ventilation System and door D-306 is unrelated to the sequence of events leading to the initiation of an accident. Since the system's accident mitigation and normal functions will be maintained, the possibility of an accident or malfunction of a different type from those evaluated in the SAR is not created.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because this activity does not affect any parameters upon which the Technical Specifications are based.

NUCLEAR WORK REQUEST (NWR)

970111599
980064861

DESCRIPTION

The purpose of the Nuclear Work Requests was to support a nitrogen freeze seal repair and cleaning of the Essential Service Water (SX) cubicle cooler in the B SX Pump room. To perform this work, flood seal FSO-2-4 had to be removed to allow the routing of hoses and equipment. This flood seal is considered to be a part of the ventilation boundary.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because since the probability of creating an initiating event of Loss of Offsite Power, Loss of Coolant Accident (LOCA), or high energy line break is not affected. Also, opening the doors will not affect any safety related equipment from a ventilation boundary perspective. The Auxiliary Building Ventilation (VA) System will still meet its intended functions, thus all other safety related equipment will not be affected from ventilation concerns. The airflow path essentially remains unchanged, thus VA will continue to function as before and the offsite does analysis remains the bounding analysis.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because this action does not have an impact on the events which initiate a LOCA or a radioactive release accident.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because this activity does not affect any parameters upon which the Technical Specifications are based.

ENGINEERING REQUEST

ER9900367

DESCRIPTION

The purpose of this Engineering Request was to evaluate the installation of a freeze seal on line 2SX16AB to support maintenance activities on the 2B Essential Service Water (SX) Pump cubicle cooler and its isolation valves.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because the referenced safety evaluation previously demonstrated that the catastrophic failure of the affected line to the 2B SX Pump cubicle cooler is bounded by the analysis in the Auxiliary Building Flooding Analysis and that there are no impacts on the opposite unit pump in the same room. Therefore, the failure affects analysis in the referenced evaluation is applicable to the installation of the freeze seal and the probability of occurrence or consequences of previous accidents is not increased for the current activity.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because the referenced evaluation determined that the installation of a freeze seal on the affected line did not impact any other Station equipment or interfacing systems. The current activity similarly ensures that no new failure mechanism or mode is created which could introduce an accident or malfunction than currently evaluated in the SAR.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because this activity does not affect any parameters upon which the Technical Specifications are based.

DESIGN CHANGE

D20-2-98-203

DESCRIPTION

The purpose of this Design Change was to install a new sample tap for radiation monitoring skid 2PR27J on the 6" Steam Jet Air Ejector (SJAE) exhaust line to detect a smaller (approximately 5 gallons/day) primary to secondary leak. The existing sample tap located on the 24" SJAE/Gland Steam Condensers/Hoggers exhaust line cannot detect lower level of primary to secondary leakage due to sample dilution.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because radiation monitoring skid 2PR27J and associated piping is non-safety-related components and are not important to safety as previously evaluated in the safety analysis report.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because radiation monitoring skid 2PR27J and associated piping component failures are not evaluated in the safety analysis report because it does not affect any plant safety functions.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because this activity does not affect any parameters upon which the Technical Specifications are based.

SETPOINT CHANGE

SSCR 99-006

DESCRIPTION

The purpose of this Setpoint Change was to 1) increase the alarm setpoint for Unit 2 Containment Floor Drain Leak Detection Flow Comparator (2FS-RF008) from 1.0 gpm to 1.3 gpm, 2) institution of a surviellance to validate that the bases for the value chosen for the setpoint have not changed in an unconservative way, and 3) restoration of the setpoint back to 1.0 gpm following cessation of secondary system leakage in Unit 2 containment. This cleared the associated Main Control Room alarm which was annunciated due to known secondary system leakage in Unit 2 Containment. This restored the alarm function in a proper fashion.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because the detection of an unidentified leakage threshold for the alarm still remains at less than or equal to 1.0 gpm. The setpoint is being increased due to known leakage. Leakage detection systems are not initiators of any accident. The function of the leakage detection system had not changed.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because the detection of an unidentified leakage threshold for the alarm still remains at less than or equal to 1.0 gpm. The function of the leakage detection system has not changed. This activity does not affect any other safety related structures, systems or componets.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because the proposed activity does not affect any parameters upon which the Technical Specifications in this section are based. The unidentified leakage requirement remains at less than or equal to 1.0 gpm.

EXEMPT CHANGE

D20-1-97-282

DESCRIPTION

The purpose of this Exempt Change was to add isolation valves on the recirculation lines of the Blowdown Condenser Hotwell pumps. The recirculation lines of the two Blowdown Condenser Hotwell pumps discharged to a common header. This piping configuration did not allow maintenance on the subject pumps on an individual basis. Temporary Alterations needed to be installed if one pump was to remain in operation while maintenance was performed on the other pump.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because addition of the isolation valves to allow for pump maintenance of one pump while the other remains on line has no adverse impact on any UFSAR analyzed accidents. The structural integrity of the piping has been assured and changes in the recirculation flow characteristics are insignificant. Addition of the isolation valves has no adverse impact on the capability of the Blowdown Condenser Hotwell pumps to maintain the hotwell level of each Blowdown Condenser.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because the structural integrity of the piping was assured. The changes to the recirculation flow characteristics were insignificant since the pressure drop introduced was equivalent to less than 1.5 feet of piping. In addition, the subject change did not adversely impact SSCs or their functions.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because this activity does not affect any parameters upon which the Technical Specifications are based.

EXEMPT CHANGE

E20-2-97-312

DESCRIPTION

The purpose of this Exempt Change was to modify the Auxiliary Feedwater (AF) control valves 2AF005A-H to limit the AF flow to a faulted Steam Generator (S/G) to 464 gpm during a postulated S/G tube rupture event. This was achieved by replacing internal trim and limiting the full open position of each valve. In the meantime, all other minimum and maximum flow limits, required by accidents and transients analyzed in UFSAR chapter 15, have been met.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because the subject valves are not the initiators of any of the analyzed accidents nor interact with other systems or components. The consequences of any accident were not adversely affected because the AF flowrate required to mitigate any of the accidents were not affected.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because the design change ensures meeting the required maximum and minimum flows, and the valve failure made was not affected.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because no Technical Specifications were affected by the design change. All Technical Specifications and UFSAR requirements were met.

SPECIAL PROCESS PROCEDURE

SPP 99-006 Through SPP 99-013

DESCRIPTION

The purpose of these Special Process Procedures was to inject a chemical into the Circulating Water side of one Main Condenser waterbox at a time in order to remove the scale that has formed on the internal surfaces of the Main Condenser tubes.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because the chemical cleaning activities do not increase the probability of occurrence or the consequences of a loss of condenser vacuum, steam generator tube rupture, LOCA or circulating water system piping failure in the Turbine Building. The calcium carbonate deposits inside the condenser tubes may be plugging pinhole leaks that may open-up during the chemical cleaning process. These leaks would affect secondary side chemistry; augmented monitoring is in place during the cleaning and appropriate action levels are taken per the existing Secondary Side Water Chemistry Program. The Main Control Room (MCR) habitability has been evaluated in the event of a chemical release onsite; the MCR remains habitable.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because the chemical cleaning process is expected to uncover some pinhole leaks. These will be no different than pinhole leaks discovered during normal operation. A report prepared by Dominion Engineering shows that the chemical cleaning process will not introduce, upon a condenser tube leak, chemistry species into the steam generators (SG) that are different than the chemistry species already present in the steam generators during normal plant operation. The main condenser cleaning process does not directly contact or impact the RCS pressure boundary. Since only one waterbox is cleaned at a time, no credible circulating water system failure is expected that is more significant than the design basis flood related to the failure of a CW pipe.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because the operation of any equipment addressed in the Technical Specifications is not affected.

DESIGN CHANGE

D20-0-99-308

DESCRIPTION

The purpose of this Design Change was to make physical improvements to the Circulating Water (CW) Chemical Feed (CF) System originally installed under Modification M20-0-95-003. These changes include replacing tube/hose fittings at locations prone to leakage or failure; re-routing CF piping to improve personnel access to the chem feed skids; providing hard PVC piping to replace tygon hoses used to direct vented system effluents to a collection container; and installing flanges on the chemical injection pump inlets and outlets to facilitate maintenance on the pumps.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because this activity involves physical improvements to the original installation without introducing any new functional or operational changes to the system. No new failure modes are introduced by the changes under D20-0-99-308, therefore these changes will not increase the probability of an accident or malfunction previously evaluated in the SAR.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because this activity does not impact any other station equipment or interfacing systems. No new failure mechanism or mode is created which could introduce an accident or malfunction different than currently evaluated in the SAR.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because this activity does not affect any parameters upon which the Technical Specification are based.

NUCLEAR WORK REQUEST (NWR)

990002703
990002723

DESCRIPTION

The purpose of these Nuclear Work Requests was to perform work on the 0WX01DA and 0WX01DB tanks. To support the work, the floor plug must be removed to access the tanks. The floor plug is part of an HVAC boundary.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because the new flowpath has been evaluated and has determined that the flowpath is acceptable and will maintain the Auxiliary Building within acceptable limits. Therefore no malfunction of equipment important to safety exists.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because there is no increase in the consequences of an equipment malfunction since no new assumptions are being made with regard to the reliance on equipment or equipment performance.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because the change does not affect the Technical Specification requirements involving any ventilation flow or differential pressure requirements.

DESIGN CHANGE

D20-0-98-300

DESCRIPTION

The purpose of this Design Change was to upgrade the seismic monitoring instrumentation. Existing seismic monitoring components that are being replaced in panel 0PA02J include the annunciator, playback unit digital cassette accelerograph, response spectrum analyzer, and uninterruptible power supply (UPS). The free field seismic sensor and free field seismic trigger are also being replaced. The new components installed in 0PA02J include the following: GNC-CR seismic data acquisition system, laptop computer, printer, replacement UPS, and annunciator module.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because the seismic monitoring instrumentation does not interact with other plant systems in a manner that could cause an accident or plant transient. The replacement of the existing seismic monitoring instrumentation will not increase the probability of an accident or plant transient. The seismic monitoring instrumentation does not interface with any SSCs relied upon to keep the offsite dose within 10CFR100 limits, for accidents or plant transients that have potential radiological consequences. Any potential interactions between the replacement equipment and other SSCs have been considered in the design process. The replacement system has been tested to demonstrate its acceptability in terms of conducted or radiated emissions (potential effect on adjacent plant equipment), as well as its susceptibility to electromagnetic interference. The testing demonstrated that the replacement system will not affect equipment important to safety in the vicinity of 0PA02J. Considering the above, the probability of a malfunction of equipment important to safety will not increase.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because the function of the seismic monitoring instrumentation is to collect data to determine the magnitude of a seismic event. However, the seismic monitoring instrumentation does not affect operation of equipment important to safety. This design change is being performed in accordance with the original design and functional requirements for the existing seismic monitoring instrumentation, and will increase system reliability and availability.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because the seismic monitoring instrumentation is not part of any Technical Specification Limiting Condition for Operation. This equipment is not discussed in the Technical Specification Bases. Requirements related to this equipment are contained in the Technical Requirements Manual. The seismic monitoring instrumentation does not affect any SSCs where margin of safety is a consideration.

NUCLEAR WORK REQUEST (NWR)

970025556
970083765

DESCRIPTION

The purpose of these Work Requests was to install a freeze seal of the Essential Service Water (SX) System lines to support cleaning of the cubicle cooler and valve work. Door D-274 was propped open during this time to provide a path for routing the necessary hoses/cables for the freeze seals. This door is an HVAC boundary door.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because the Auxiliary Building will be required to maintain at least –0.3 inches of water during valve repairs. This will satisfy the requirement for the ECCS pump rooms to maintain a minimum of –0.25 inches of water with respect to outside atmosphere.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because this work does not have any impact on the events which initiate a Loss of Coolant Accident or a radioactive release accident. The freeze seal was installed and controlled in accordance with approved Station procedures.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because all Technical Specification requirements were met during this activity.

DESIGN CHANGE

D20-1/2-98-342

DESCRIPTION

The purpose of this Design Change was to install a permanent 12 inch linestop fitting and a 2 inch equalization fitting on the Non-Essential Service Water (WS) Supply headers 2WS04A-18" and 1WS96A-20". The linestop fittings allow the use of linestopping equipment to temporarily isolate WS flow to the Main Turbine Oil Cooler to permit maintenance activities on the cooler isolation valves and downstream equipment.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because the design and installation methodology of the linestop fittings maintains the pressure boundary integrity of the system and therefore prevents the occurrence of a Loss of WS, a Loss of Instrument Air, or a flooding condition in the Turbine Building. The impact of these transients on the unaffected (opposite) unit are bounded by the existing transients discussed in UFSAR Sections 15.2, 9.3.1.3, and 10.4.5.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because considerations to maintain the pressure boundary integrity of the WS System were incorporated in the design and installation of the temporary linestops. These design considerations prevent any impact on any Station equipment or interfacing systems to ensure that no new failure mechanism or mode is created which could introduce an accident or malfunction that currently evaluated in the UFSAR.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because this activity does not affect any parameters upon which the Technical Specifications are based.

PROCEDURE REVISION

BwMP 3100-095

DESCRIPTION

The purpose of this Procedure Revision was to disconnect, blank, and reconnect Containment Chiller Essential Service Water (SX) supply and discharge lines for Containment Chiller 1WO01CB.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because the revision adds the fourth Containment Chiller to the procedure. The maintenance performed on 1WO01CB is the same as for the other three, previously-evaluated chillers. This activity provides the steps necessary to perform maintenance work on the chillers.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because the same maintenance is performed on 1WO01CB as on the other three, previously-evaluated chillers. This activity provides the steps necessary to perform maintenance work on the chillers.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because all Technical Specification requirements were met during this activity.

WORK REQUEST

970031953

DESCRIPTION

The purpose of this Work Request was to remove the 2CS01PA Pump from the 2A Containment Spary (CS) Pump room. To access the pump, the floor plug to the 2A CS Pump room will be removed. The floor plug is part of the HVAC safety related boundary.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because the Auxiliary Building will be maintained at least –0.3 inches of water during repairs. This will satisfy the requirement for the ECCS pump rooms to maintain a minimum of –0.25 inches of water with respect to outside atmosphere.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because this work does not have any impact on the events which initiate a Loss of Coolant Accident or a radioactive release accident.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because all Technical Specification requirements were not during this activity.

UFSAR REVISION

Draft Revision Package 7-116

DESCRIPTION

The purpose of this Draft Revision Package (DRP) was to revise the original discussion of the setpoint at which the Auxiliary Feedwater (AF) Pump suction switchover from the Condensate Storage Tank (CST) to the Essential Service Water (SX) System occurs to a functional description of the pressure switches on the suction of the Auxiliary Feewater Pumps.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because the activity incorporates a functional description of the pressure switches on the suction lines to the Auxiliary Feedwater Pumps. This discussion does not involve a change to the design or operation of the system and only reflects the as-built condition of the plant. The change eliminates specific references to the setpoints associated with the pressure switches. This information is captured in other controlled documents and the elimination of this information from the UFSAR will not result in operation outside the design basis of the plant. Therefore, the probability of occurrence and the consequences of any accident associated with the affected system and components is not changed by the implementation of this change.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because the functional description of the pressure switches associated with the suction lines to the Auxiliary Feedwater Pumps does not introduce any new failure mechanism or modes, nor does it increase the possibility of system operation outside its design basis. Therefore, there is no possibility of creating an accident or malfunction different from those evaluated in the UFSAR by the implementation of this change.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because this activity does not affect any parameters upon which the Technical Specifications are based.

MODIFICATION TEST

E20-2-96-306-1

DESCRIPTION

The purpose of this Modification Test was to verify that the nozzle style check valves (2FW001B/C) prevent reverse flow, pass sufficient flow to support full power operation, and do not adversely affect Main Feedwater Pump speed.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because the modification testing will be conducted in conjunction with normal plant start-up activities utilizing approved operating procedures. In addition, the replacement nozzle style check valves are more reliable, since they are not susceptible to flutter wear degradation that the existing swing check valves experience. Hence, the malfunction of safety related equipment is reduced.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because the replacement nozzle style check valves are more reliable and modification testing will be conducted utilizing approved operating procedures. The existing check valves are simply being replaced with a more reliable style. Hence, no new/unanalyzed accident scenarios are created.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because the proposed modification test does not alter or challenge the operation of the safety related portions of the Main Feedwater System. More reliable check valves improves the margin of safety of the downstream safety related portions of the feedwater system. This activity does not affect any parameters upon which the Technical Specifications are based.

TECHNICAL SPECIFICATION BASES REVISION

Revision 1-99

DESCRIPTION

The purpose of this Technical Specification Bases Revision (Bases Section B 3.6.3) was to correct the Improved Technical Specification (ITS) Bases Table numbering and provide the appropriate ITS condition entry for containment penetration 94 (containment post – LOCA purge/containment mini-flow purge exhaust).

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because the proposed activity will not affect plant operations. The correction of the ITS Bases Table numbering and the new discussions in the Action Section of the Bases and the Actions Table B3.6.3-2 will add separate Action requirements for the mini-purge and post – LOCA purge flowpaths. There is no affect on either the probability or consequences of an accident. This activity is administrative in nature and is ensuring the Bases is technically correct.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because the proposed activity will not impact the operation of the containment ventilation vent isolation function. Therefore, the proposed ITS Bases (B3.6.3) changes will not create the possibility of a different type of accident or malfunction. General Design Criterion 56 is still being met. This activity is administrative in nature and is ensuring the Bases is technically correct.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because the proposed activity will not impact plant operations or the operation of the containment ventilation isolation function.

PROCEDURE REVISION

Maintenance Instruction MI-M-11, Revision 3

DESCRIPTION

The purpose of this Maintenance Instruction Revision was to provide a method for the installation and control of temporary lead shielding on structures, systems or components to achieve a reduction in personnel radiation exposure. In addition, guidelines were provided for the use of water shield, frisker booths, and shielding structures.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because this activity implements a controlled mechanism for the installation and removal of lead shielding using an evaluation process which maintains the design basis and functionality of the affected system, structure, or component (SSC). The installation of the temporary shielding does not create an accident initiating condition, nor does it impact the ability of any SSC to mitigate the consequences of any accident.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because no new failure modes or conditions are created by the implementation of this activity. No interactions are created with interfacing equipment that could create or impact any new accident.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because this activity does not affect any parameters upon which Technical Specifications are based.

PROCEDURE REVISION

BwOR WEST-183
Through
BwOR WEST-189

DESCRIPTION

The purpose of these Procedure Revisions was to provide detailed guidance for the Digital Rod Position Indication (DRPI) and Control Rod Drive Mechanism (CRDM) Cable and Connector Upgrade Modifications. These procedures describe the training requirements, physical work activities, and construction testing associated with CDRM cable and connector replacement, CRDM field cable splicing, and DRPI cable and connector replacement.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because neither of the SSCs affected are required to be operable during Modes 5 and 6 with the initial plant conditions of all rods fully inserted with no ability to move rods. The majority of the testing is performed de-energized and cannot cause an accident or transient. The partial DRPI system test performed while energized checks normal operation of portions of that system (with the exception of actual rod motion), thus no increase of probability is possible and the activities are bounded by existing accident or transient analysis.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because the procedures and tests described are being performed on SSCs which are not required while the plant is in Modes 5 and 6 with all rods fully inserted and no rod motion capability. These procedures and tests provide no new or different malfunctions for equipment important to safety. Failures analyzed under UFSAR Section 15 assume the plant is operating; the plant is in cold shutdown and refuel for these procedures and tests, thus any possible malfunctions are bounded by the analyses already performed.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because no accidents or transients are identified as applicable in Modes 5 and 6 with all rods fully inserted and no rods capable of motion. This activity does not affect any parameters upon which the Technical Specifications are based.

TEMPORARY MODIFICATION

99-1-008

DESCRIPTION

The purpose of this Temporary Modification was to install a blank-off plate in place of the existing orifice plate to isolate the 1B Steam Generator Blowdown Condenser Hotwell Pump for maintenance.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because the Steam Generator Blowdown System is not an accident initiator and is not used to mitigate the consequences of an accident. This activity does not affect the high energy line break analysis. The system was still capable of performing its design function.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because no new equipment was added to the plant. The system was still capable of performing its design function. This activity did not affect the operation of the plant.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because this activity does not affect any parameters upon which the Technical Specifications are based.

DOCUMENT CHANGE REQUEST

D20-0-98-337

DESCRIPTION

The purpose of this Document Change Request was to replace the Main Control Room furniture, desk tops, and carpeting. Also, portions of the previously abandoned Emergency Breathing Air (EA) System piping and supports in the Main Control Room were removed.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because the replacement of the Main Control Room furniture and carpeting and the removal of the abandoned EA System components does not increase the probability of occurrence of an accident since these changes do not impact Containment Systems or a Loss of Coolant Accident (LOCA). Neither the Main Control Room boundary nor the ventilation system is affected by these changes. Therefore, the consequences of a LOCA are not impacted because operator dose in the Main Control Room is not affected. No safety related equipment is affected by the furniture and carpeting replacement nor by the removal of the abandoned EA components. The furniture is adequately restrained to prevent adverse interaction with safety related equipment in the Main Control Room during a seismic event. Therefore, the probability of a malfunction of equipment important to safety is not effected.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because the Main Control Room equipment will still operate as required. The replacement furniture is installed with seismic loading considerations addressed. The fire load impact has been reviewed and deemed acceptable. The ventilation system for the Main Control Room is not affected by the design changes. Therefore, no new accidents or malfunctions are created as a result of the design changes.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because the changes do not affect any parameters upon which the Technical Specifications are based.

PROCEDURE REVISION

1/2BwVS TRM 3.4.F.2-SA2

DESCRIPTION

The purpose of the Procedure Revisions was to address testing of the buried pipe portion of the Station Air System for each Diesel Generator that required isolating one of the two receiver tanks (right or left bank) from the diesel engine. The isolation will not make the Diesel Generator inoperable since only one receiver tank pressurized to >175 psig is required to start the diesel.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because the Diesel Generators will be available to perform their assumed function in the event of a loss of offsite power. The diesels will still start with the control and cranking air from the one reciever not isolated. As stated in UFSAR Section 9.5.6, "...each individual tank has sufficient capacity to provide four starts."

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because the action will be transparent to plant operation. In the event that a loss of offsite power occurs, both Diesel Generators will still be available to start and load within the required 10 seconds. Testing has demonstrated that a diesel can satisfy it's starting requirements from one receiver tank.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because the diesel train being tested will still be operable as previously discussed with one receiver tank capable of supporting diesel operation. Technical Specification requirements were met during the performance of the procedure.

TEMPORARY MODIFICATION

TMOD 99-1-009

DESCRIPTION

The purpose of this Temporary Modification (TMOD) was to install a pneumatic jumper around the solenoid on the air supply to the operator for valves 1OG007A-D. These are the water level control valves for the priming tanks on the vent line from the main condenser outlet waterboxes. The pneumatic bypass maintains the 1OG007s valves open, when the solenoid on the air supply line is de-energized, by providing a continuous air supply to the operator for the valves. The solenoid valves are de-energized during the installation activities of a modification that relocated the 1OG007A-D valves.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because the activities related to the installation of the pneumatic jumper for the solenoids for valves 1OG007A-D will maintain the function of the main condenser vacuum control system as the vacuum pump piping will not be isolated. The analyzed flood in the Turbine Building is due to a circulating water line break that cannot be isolated. The resulting flood height in the Turbine Building would be to 5 feet below grade. The implementation of TMOD 99-1-009 does not have any impact on the Circulating Water System (CW) piping.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because the function of the level control system on the priming tanks is to avoid flooding the suction of the priming pump. With the pneumatic jumper in place, the level control valves will not be able to automatically close on a high water level signal in the corresponding priming tank. However, actual plant conditions cannot result in water level from a condenser waterbox to reach the suction of the priming pump. The CW pressure would be sufficient to lift the water above the priming pumps suction peak elevation when a waterbox CW outlet isolation valve is closed forcing full CW pump discharge pressure on a waterbox. Plant procedures do not allow this condition.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because this activity does not affect any parameters upon which the Technical Specifications are based.

MODIFICATION TEST

D20-2-98-309

DESCRIPTION

The purpose of this Modification Test was to perform a functional test of the Unit 2 Fuel Transfer System following upgrade installation.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because per UFSAR 15.7.4.2.1 and 15.7.4.2.2 the accident is defined as dropping of a spent fuel assembly in the spent fuel pool or core resulting in the rupture of 314 fuel rods. The cause can be identified as any mechanical or operating failure. This test is a system (Fuel Transfer) that moves assemblies from the Fuel Handling Building to the Containment of either Unit. The system is incapable of moving assemblies over the Spent Fuel Pool or either core. No spent fuel assembly will be used to perform this test. Therefore, the probability accident or malfunction is not increased.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because this change will not degrade features of the system as described in the UFSAR. The operational impact will be to increase fuel handling efficiency. The increased cart speed is not postulated to increase the likelihood of any type accident. The dropping of a spent assembly is not postulated as an accident in the UFSAR. Testing will not be performed using spent or new fuel assemblies. Testing will not alter the mechanical or structural feature of the design. Testing will ensure the designs built-in safety features minimize the likelihood of fuel assembly damage. The postulated accident/events remain bounding, and will not create any new accidents not previously evaluated.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because this activity does not affect any parameters upon which the Technical Specifications are based. Therefore, there is no reduction in the margin of safety.

NUCLEAR WORK REQUEST (NWR)

970080662

DESCRIPTION

The purpose of this Nuclear Work Request was to remove the 2CV01DB floor plug to access the mixed bed demineralizers for roto-hammer inspection. The floor plug is an HVAC boundary.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because the new flowpath has been evaluated has determined that the flowpath is acceptable and will maintain the Auxiliary Building within acceptable limits. Thus no malfunction of equipment important to safety exists.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because the operation of plant safety related equipment required to mitigate the consequences of a malfunction of equipment important to safety will not be degraded due to ventilation concerns. There is no increase in the consequences of an equipment malfunction since no new assumptions are being made with regard to the reliance on equipment or equipment performance.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because the floor plug removal does not affect any Technical Specification requirements involving HVAC differential pressure or air flows.

MODIFICATION TEST

E20-1-96-288-001-1, E20-1-96-288-001-2
E20-1-96-288-002-1, E20-1-96-288-002-2
E20-2-96-288-003-1, E20-2-96-288-003-2
E20-2-96-288-004-1, E20-2-96-288-004-2

DESCRIPTION

The purpose of these Modification Tests was to verify the hydraulic accumulator relief valves installed on the Main Steam Isolation Valves (MSIVs) lift and reset per design and that accumulator pressure can be manually reduced by the accumulator relief bypass valves.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because the exempt change installs a relief valve assembly on each of the MSIV hydraulic accumulator circuits. The new assembly does not adversely affect MSIV operation or function. The relief valve assembly can not realign solenoid valves or directional control vales associated with the actuator. Therefore, manipulation of relief valve assembly components as discussed in the modification test will not result in inadvertent actuation of the MSIV. As a result, the probability of an accident or malfunction evaluated in the safety analysis report is not increased.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because malfunction of the MSIVs has been previously evaluated in the UFSAR. The modifications added a relief valve assembly to the hydraulic accumulator of the MSIVs. The occurrence of the installed relief valve to stick open is a possible malfunction. However, the manifold has an orifice installed to ensure that if the relief valve malfunctions, the flow will be limited to less than the makeup capability of the hydraulic pump. This will ensure sufficient hydraulic pressure is present in the accumulator to close the MSIV in the required time. The modification test will not adversely affect the components of the relief valve assembly but will only verify that these components function as designed. Therefore, the possibility of an accident or malfunction of a different type from those previously evaluated is not created.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because the consequences of an MSIV malfunction are unchanged. Inadvertent closure of the MSIV has already been evaluated in the UFSAR. The modification test will be performed in a mode of operation where the MSIVs are not required to be operational. Therefore, this modification or associated modification test does not affect the margin of safety as defined in the Bases of any Technical Specification.

PROCEDURE REVISION

2Bw0A PRI-5

DESCRIPTION

The purpose of this Procedure Revision was to incorporate the change to the 2CC685 flow transmitters and their flow setpoint for auto closure.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because a failure to the 2CC685 isolation valve to automatically close as a result of a thermal barrier rupture has not changed. Manual operator action is the backup to the automatic closure. The necessary plant instrumentation and alarms necessary to detect and diagnose the condition are not impacted by these changes. The affected instruments will not degrade or prevent the operations on any SSC, including automatic closure of the 2CC685 on a Phase B containment isolation signal. Therefore, these changes do not increase the probability of occurrence of a malfunction of equipment important to safety.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because this change does not adversely impact the operation or function of any plant SSC important to safety, including the Component Cooling Water System, Reactor Coolant Pumps, or containment isolation features. Component Cooling Water System parameters during normal and accident conditions remain unchanged as a result of this change. Therefore, no new accidents are created by this change.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because this activity does not affect any parameters upon which the Technical Specifications are based.

DESIGN CHANGE

D20-2-98-322-001
D20-2-98-322-002

DESCRIPTION

The purpose of this evaluation was to evaluate the lifting, transporting and laydown activities for the missile shield that were associated with the Control Rod Drive Mechanism (CRDM) and Digital Rod Position Indication (DRPI) cable replacement design changes listed above.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because the removal of the missile shield is referred to in UFSAR Section 9.1.4.2.2. Lifting will be performed with the containment building polar crane, which satisfies the requirements of NUREG-0612 for the lifting of the entire integrated head package. The missile shield lift is bounded by the full head lift. Calculation BRW-99-0031, revision 0 demonstrates that the missile shield has adequate design margin against overturning during laydown. Therefore, the probability of occurrence of any postulated accident is not increased.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because UFSAR Section 9.1.4.3.1 states that an analysis has been performed to determine the effects on reactor cooling and fuel integrity from a load drop of the reactor vessel head onto the reactor vessel. The analysis, which is provided in WCAP 9198, is applicable to Byron and Braidwood. The missile shield is a component of the vessel head package, and the missile shield laydown will be at a lower elevation than its laydown position atop the head package. Since the weight and elevation of the head package bound the weight and elevation of the missile shield, the potential energy of the missile shield is bounded by the potential energy of the head package at its laydown position. Therefore, the referenced analysis bounds the conditions for the removed missile shield. Although the laydown area for this activity is not the normal laydown area for the missile shield, calculation 19.13.0-BRW-99-0031 demonstrates that it is seismically supported in it laydown position. Therefore, the possibility of an accident or transient of a different type than previously evaluated is not created.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because this activity does not affect any parameters upon which the Technical Specifications are based.

DESIGN CHANGE

D20-2-98-341
D20-2-99-303

DESCRIPTION

The purpose of these Design Changes was to replace the current Crosby model JRAK relief valves (with a set pressure 1750 psig) for Equipment Piece Numbers (EPNs) 2SI8851, 2SI8853A and 2SI8853B with Crosby OMNI 900 series relief valves (with a set pressure at 1815 psig). Design Change D20-2-99-303 is to increase the set pressure for the current Crosby relief valves, with the above EPNs, from 1705 psig to 1825 psig. Design change D20-2-99-303 is an interim solution to improve the reliability of the Safety Injection (SI) System until the new valve (OMNI series 900 model) are available for use. In both design changes, the design pressure for portions of the SI System piping bounded by valves 2SI8802A and B, 2SI8835, 2SI8888, 2SI8922A and B, including other bypass and vent lines, is being increased from 1750 psig to 1825 psig.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because the proposed design changes do not change the function or operation of the Emergency Core Cooling System (ECCS). The design changes increase the design pressure of the system consistent with licensing commitments to ASME criteria. The integrity of the SI System pressure boundary and injection flowpaths are not degraded in any way as a result of the implementation of this design change. The function of the SI System is not being affected and over-pressure protection of SI piping is maintained.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because the function of the SI and ECCS is maintained and no new failure modes are created. The over-pressure protection of SI piping is maintained and there are no direct or indirect impacts on interfacing systems and components.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because the proposed design changes maintain the integrity and function of the SI System flowpaths relied upon to perform injection and long term cooling functions for the ECCS System. Calculation has shown the acceptability of the increased system design pressure and supports the increase in the affected relief valve setpoints.

NUCLEAR WORK REQUEST (NWR)

970117769

DESCRIPTION

The purpose of this Nuclear Work Request was to perform the 2CS020B check valve partial stroke test. Doors D-246 and D-844 will need to be propped open during the test to allow routing of hoses into the 2B Containment Spray (CS) room. These doors are HVAC boundary doors.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because opening the doors does not have any impact on the events which initiate a Loss of Coolant Accident (LOCA) or has no impact on system piping to cause flooding accident. Opening the doors with the administrative controls in place ensures any design base accident remains bounded by the existing off-site dose boundary analysis calculation.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because the affected structure provides a venitlation boundary for Auxiliary Building Ventilation (VA) Systems. Part of the design requirements for the VA System is to limit environmental conditions in various zones in conformance with requirements as listed in Table 3.11-2, Zone A13C. The High Energy Line Break (HELB) analysis was reviewed for environmental impact in the 2B CS room and was determined to be insignificant due to the 2B CS Pump being inoperable during this work. Also, the system controls radioactivity in the areas served by staging the supply air from the clean areas to the areas of greater potential contamination. Opening the doors could affect the differential pressure requirements within certain ECCS rooms, thus affecting Technical Specification requirements. Therefore, administrative controls will be established prior to and during the time frame the door are open. This will ensure all normal and accident mitigation functions of VA System are met. Additionally, the Braidwood flooding analysis was reviewed. The potential for flooding the 2B CS Pump room via the open doors is within the conditions assumed in the existing Auxiliary Building flooding calculation. Plant operation is not changed. No new failure modes are introduced.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because this activity does not affect any parameters upon which the Technical Specifications are based.

NUCLEAR WORK REQUEST (NWR)

980005103

DESCRIPTION

The purpose of this Nuclear Work Request was to drain freon from the 1WO01CB chiller which required propping open Door D-305 to allow routing of hoses into the Containment Chiller Room. This door is considered an HVAC boundary door.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because the accident mitigation function and normal functions of the Auxiliary Building Ventilation (VA) System will still continue to maintain the building at a negative pressure, control post accident radioactivity leaking from the ECCS equipment within required limits, and maintain environmental qualification zone requirements for the affected areas.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because the Auxiliary Building Ventialtion System and Door D-305 is unrelated to the sequence of events leading to the initiation of an accident. Since the system's accident mitigation and normal functions will be maintained, the possibility of an accident or malfunction of a different type from those evaluated in the SAR is not created.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because this activity does not affect any parameters upon which the Technical Specifications are based.

SPECIAL PROCESS PROCEDURE

SPP 99-020

DESCRIPTION

The purpose of this Special Process Procedure (SPP) was to test portions of Class 1 RHR System (between valves 2RH8701A and2RH8701B) during Modes 1, 2 and/or 3, to determine the pressure of the water between these valves. This activity is part of the required ASME Section XI Testing.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because the test gauge assembly being installed is constructed of materials compatible with and capable of withstanding Reactor Coolant System (RCS) pressure. In addition, all activities associated with this SPP are performed within the Reactor Containment Building. In the event excessive leakage would occur, the leakage would travel to the containment sump and would be included in the recirculation phase of Emergency Core Cooling System (ECCS) after Refueling Water Storage Tank (RWST) inventory is depleted. Plant operation will remain within Technical Specification and analysis requirements.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because the maximum diameter opening created during the verification of system pressure for RCS leakage would be ¾" if the gauge assembly would fail. The loss of RCS inventory is bounded by the large bore RCS accident analysis. And does not create any new or different types of accidents than those previously evaluated.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because valve 2RH014A is being operated as designed, i.e. stroke open and close. The test gauge assembly is compatible with and capable of withstanding RCS pressure. No additional pressure source or inventory will be introduced to challenge existing over-protection provisions, and with no flow that will be directed outside the system boundary.

TEMPORARY MODIFICATION

99-0-001

DESCRIPTION

The purpose of this Temporary Modification (TMOD) was to install a temporary barrier to support the removal and replacement of Door D-325 under Work Request 980034830. Door D-325 is the Turbine Building to Auxiliary Building equipment door at elevation 401' near column 21, row L.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because no function change or new failure modes are introduced under TMOD 99-0-001. The temporary barrier is analyzed to provide an adequate High Energy Line Break (HELB)/HVAC barrier as documented by Calculation 7.16.20-BRW-99-0004. Fire boundary and security boundary requirements are addressed under the Plant Barrier Impairment program. Therefore, the temporary barrier installed under TMOD 99-0-001 will not increase the probability or consequences of an accident or malfunction previously evaluated in the UFSAR.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because the installation of the temporary barrier will not adversely impact any other Station equipment or interfacing systems. No new failure mechanisms or modes are created which could introduce an accident or malfunction different than currently evaluated in the UFSAR.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because this activity does not affect any parameters upon which the Technical Specifications are based.

SPECIAL PROCESS PROCEDURE

SPP 99-006, 007, 008, 009
010, 011, 012, 013
BwOR FRAM 181, BwOR FRAM 182

DESCRIPTION

The purpose of these Special Process Procedures was to inject a chemical into the Circulating Water side of one Main Condenser waterbox at a time in order to remove the scale that has formed on the internal surfaces of the Main Condenser tubes.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because the chemical cleaning activities do not increase the probability of occurrence or the consequences of a loss of condenser vacuum, steam generator tube rupture, LOCA or circulating water system piping failure in the Turbine Building. The calcium carbonate deposits inside the condenser tubes may be plugging pinhole leaks that may open-up during the chemical cleaning process. These leaks would affect secondary side chemistry; augmented monitoring is in place during the cleaning and appropriate action levels are taken per the existing Secondary Side Water Chemistry Program. The Main Control Room (MCR) habitability has been evaluated in the event of a chemical release onsite; the MCR remains habitable.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because the chemical cleaning process is expected to uncover some pinhole leaks. These will be no different than pinhole leaks discovered during normal operation. A report prepared by Dominion Engineering shows that the chemical cleaning process will not introduce, upon a condenser tube leak, chemistry species into the steam generators (SG) that are different than the chemistry species already present in the steam generators during normal plant operation. The main condenser cleaning process does not directly contact or impact the RCS pressure boundary. Since only one waterbox is cleaned at a time, no credible circulating water system failure is expected that is more significant than the design basis flood related to the failure of a CW pipe.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because the operation of any equipment addressed in the Technical Specifications is not affected.

MODIFICATION

M20-1-96-001
M20-2-96-001

DESCRIPTION

The purpose of these Modifications was to replace the existing Safety Related AT&T high specific gravity round cell batteries and racks with C&D LCUN-33 lead calcium batteries and associated racks. The battery chargers had their float/equalize voltage settings adjusted for the new batteries. Cross-tie amperage was increased from 100A to 200A. Fire damper enclosures in the battery rooms were shortened to allow for the racks to be installed closer to the wall. Battery cables were rerouted.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because the function of the Safety related 125V DC System will not change with this change. The design basis for the batteries will still apply. The present battery room ventilation is still capable of meeting its design basis conditions for cooling/heating and byproduct gas removal for the room. There is no affect of the battery replacement on equipment failures to the DC System or interfacing systems. The C&D LCUN-33 batteries and racks have been qualified through tests and analysis for the required operation and therefore the chances of a failure is reduced and equal to that of the presently installed equipment.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because the new batteries replace presently installed batteries. The batteries operate in a similar manner as the present batteries do. A loss of offsite power would be caused by conditions outside the plant, or failures in the main power or auxiliary power systems. None of these systems are impacted by this modification.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because the changes performed under this modification are either conservative compared to the present design or are well within the design basis of the plant and related system. The overall operation of both the batteries, DC System, fire protection systems (dampers) and the plant as a whole will be essentially unchanged by the scope of this modification. A Technical Specification revision has been submitted to reflect the new C&D batteries. The basis has been revised to include IEEE 450-1995 requirements recommended by the NRC for incorporation. The design for the new batteries meets the description in the basis of the Technical Specifications.

DESIGN CHANGE

D20-2-98-228

DESCRIPTION

The purpose of this Design Change was to replace the Circulating Water Pump discharge isolation valve 2CW001B at the Lake Screen House. The original type valve was replaced with a flanged butterfly valve. The existing valve actuator was re-used, but a new adapter was installed to accommodate the new valve. The expansion joint upstream of the 2CW001B valve was replaced with a Single Arch Expansion Joint to facilitate valve replacement.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because no new failure or operational modes are introduced by this activity. Circulating Water System pressure boundary integrity is maintained and there are no adverse impacts on the Lake Screen House or Ultimate Heat Sink. Therefore, the changes implemented this activity will not increase the probability of an accident or malfunction previously evaluated in the UFSAR.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because the replacement of valve 2CW001B will not adversely impact any other station equipment or interfacing systems. No new failure mechanisms or modes are created which could introduce an accident or malfunction different than currently evaluated in the UFSAR.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because this activity does not affect any parameters upon which the Technical Specifications are based.

TECHNICAL REQUIREMENTS MANUAL REVISION

Revision 1

DESCRIPTION

The purpose of this Technical Requirements Manual (TRM) Revision (Section 3.7.b) was to eliminate the requirement to only perform snubber functional testing during refuel outages. This section of the Technical Requirements Manual was revised to eliminate the need to perform an Engineering Evaluation on piping systems when required snubbers are removed for maintenance purposes or functional testing from systems that are required to be operable provided the snubber meets all functional test acceptance criteria. A required snubber is defined as a snubber that is installed in a system, system train, or portion of a system that is required to be operable in a specific Mode or Modes of Operation or is required to maintain a Safe Shutdown Condition. The revision of the TRM requires that the Engineering Evaluation be performed only when a snubber is discovered to be inoperable (e.g. identified as unpinned during visual examination) or when it fails to meet the functional test acceptance criteria.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because the absence or presence of a required snubber is not an initiator for any accident or transient. The probability of accidents and transients is independent of the existence of required snubbers. As stated in the current and revised section of the Technical Requirements Manual, each snubber must be removed, tested, and reinstalled within 72 hours or comply with the additional action of declaring the associated system or component as inoperable and follow the required actions for that system. The actions are consistent with those required when a snubber is discovered to be inoperable. Engineering Evaluations will continue to be performed as required to determine whether an associated component or system is able to perform as designed, when an inoperable snubber calls into question future system operability. The removal of a required snubber during plant operation does not result in an increased possibility of a breach in a radiological barrier, nor will it inhibit the ability of a system or component to mitigate the consequences of an accident.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because a required snubber must be returned to an operable status within 72 hours (Condition A) or comply with the Required Actions of Condition B (declare the attached system inoperable and follow the appropriate required actions for that system), regardless of the reason it is declared inoperable. These actions are consistent with those currently required upon discovery of an inoperable required snubber. Therefore, the removal of a snubber during plant operations will not introduce any accidents or transients that have not been previously analyzed.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because this activity does not affect any parameters upon which the Technical Specifications are based.

NUCLEAR WORK REQUESTS (NWR)

990002726
990002744

DESCRIPTION

The purpose of these Nuclear Work Requests was to perform work on the 0WX01DC and 0WX01DD tanks. To support the work, the floor plug must be removed to access the tanks. The floor plug is part of an HVAC boundary.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because the new flowpath has been evaluated and has determined that the flowpath is acceptable and will maintain the Auxiliary Building within acceptable limits. Therefore, no malfunction of equipment important to safety exists.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because no new assumptions are being made with regard to the reliance on equipment or equipment performance.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because the change does not affect the Technical Specification requirements involving any ventilation flow or differential pressure requirements.

SPECIAL PROCESS PROCEDURE

SPP 99-016
SPP 99-017
SPP 99-018
SPP 99-019

DESCRIPTION

The purpose of these Special Process Procedures (SPPs) was to provide guidance for connecting and disconnecting a Temporary Battery to each Unit 2 125 volt DC ESF Bus. The Temporary Battery was connected to each Bus for a maximum of 10 days to support installation of the new C&D Batteries.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because the DC System is not an accident initiator. The capacity of the batteries and the compensatory measures ensured the Unit 1 125 volt ESF Battery was not discharged to a loading scenario beyond the current design of the battery. Before commencing the battery replacement, the plant was required to be in a stable condition with no other Required Actions requiring a unit shutdown in effect and no adverse weather expected during the transition period.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because the Temporary Battery was located in the non-seismic Turbine Building, therefore the battery was not considered operable. This was acceptable because the time this configuration existed was limited to ≤10 days per LCO 3.8.4 Condition E. During the transition period of the SPP, the Unit 2 125 volt DC ESF Battery and Battery Charger were disconnected. In this configuration if either of the two 125 volt DC ESF Bus Cross-Tie Breakers were to open, the associated Unit 2 125 volt DC ESF Bus would de-energize resulting in a loss of power to various valves and breakers and loss of backup power to the associated Instrument Inverters and Annunciators. This condition was acceptable because it was limited to ≤8 hours per LCO 3.8.4 Condition D and Condition E.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because this activity does not affect any parameters upon which the Technical Specifications are based.

NUCLEAR WORK REQUEST (NWR)

970109854

DESCRIPTION

The purpose of this Nuclear Work Request was to clean the 2B Safety Injection (SI) Pump room cubicle cooler. To support the cleaning, Doors D-283 and D-278 will need to be propped open to allow for routing of hoses from the 2B SI Pump room, through the curved wall area, and into the 364' general area. Both of these doors are considered ventilation boundaries.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because the Auxiliary Building will be required to maintain at least -0.3 inches of water during this work. This will satisfy the requirement for the ECCS pump rooms to maintain a minimum of -0.25 inches of water with respect to outside atmosphere.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because this work does not have an impact on the events which initiate a Loss of Coolant Accident or a radioactive release accident.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because all Technical Specification and differential pressure requirements were met.

DESIGN CHANGE

D20-0-99-305-001

DESCRIPTION

The purpose of this Design Change was to install two new perimeter fences inside the protected area as part of the operational safeguard response effectiveness (OSRE) revised defensive strategy. They are installed to provide adequate delay time to allow security force members to take up defensive positions and engage a security threat.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because the fences are located outside the power block. The only interaction with plant SSCs is for gate operator battery chargers powered from Service Building lighting circuits. Since the affected circuits are protected by circuit breakers, no adverse interactions with any plant SSCs will be created. The layout was coordinated with operations and maintenance to preclude impact on plant activities.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because the fences will not affect site drainage and excavation activities will be controlled to preclude damage to the underground portion of any SSCs. Therefore, this modification will not effect plant equipment, and no new failure modes will be created.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because this activity does not affect any parameters upon which the Technical Specifications are based.

TEMPORARY MODIFICATION

99-2-006

DESCRIPTION

The purpose of this Temporary Modification (TMOD) was to install a pneumatic jumper around the solenoid on the air supply to the operator for valves 2OG007A-D. These are the water level control valves for the priming tanks on the vent line from the Main Condenser outlet waterboxes. The pneumatic bypass maintains the 2OG007s valves open, when the solenoid on the air supply line is de-energized, by providing a continuous air supple to the operator for the valves. The solenoid valves are de-energized during the installation activities of a modification that relocated the 2OG007A-D valves.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because the activities related to the installation of the pneumatic jumper for the solenoids for valves 2OG007A-D will maintain the function of the Main Condenser vacuum control system as the vacuum pump piping will not be isolated. The analyzed flood in the Turbine Building is due to a circulating water line break that cannot be isolated. The resulting flood height in the Turbine Building would be to 5 feet below grade. The implementation of this TMOD 99-2-006 does not have any impact on the Circulating Water System (CW) piping.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because the function of the level control system on the priming tanks is to avoid flooding the suction of the priming pump. With the pneumatic jumper in place, the level control valves will not be able to automatically close on a high water level signal in the corresponding priming tank. However, actual plant conditions cannot result in water level from condenser waterbox to reach the suction of the priming pump. The CW pressure would be sufficient to lift the water above the priming pumps suction peak elevation when the waterbox CW outlet isolation valves are closed forcing full CW pump discharge pressure on a waterbox. Plant procedures do not allow this condition.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because this activity does not affect any parameters upon which the Technical Specifications are based.

ABNORMAL COMPONENT POSITION

DESCRIPTION

The purpose of this Abnormal Component Position was to isolate air to the 1B Chemical and Volume Control (CV) Pump room damper (OVA2724). This failed the damper in the closed position which is its fail safe position.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because the accident mitigation function of the Auxiliary Building Ventilation (VA) System is to maintain the building at a negative pressure, control post accident radioactivity leaking from the Emergency Core Cooling System (ECCS) equipment in the areas served by the VA System, and minimize the release of airborne radioactivity by treating the Auxiliary Building and Fuel Handling Building exhaust via the VA exhaust filtration system. Since these functions will be maintained, the consequences of an accident will not be increased. The airflow path in the Auxiliary Building remains unchanged, and any airborne radioactive releases due to liquid waste and waste gas tank rupture or leakage will be filtered by the VA exhaust filtration system prior to exhausting to the environment through the vent stack. Reduced airflow into the affected rooms during the calibration of the pressure control dampers is not a concern since the airflow rate in a room is not a parameter in the offsite dose analysis.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because no new failure mode is introduced with the calibration of the pressure control dampers since the dampers will be failed to their designed fail safe positions. The equipment in the ECCS rooms will remain unaffected by the closure of the dampers. Thus the ECCS systems will still meet their intended safety functions. Also, the impact of environment qualification and ALARA considerations during this work has been evaluated and determined to be minimal for normal and accident conditions.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because this activity does not affect any parameters upon which the Technical Specifications are based.

TECHNICAL SPECIFICATION BASES

Revision 2

DESCRIPTION

The purpose of this Technical Specification Bases Revision was to revise the Braidwood Unit 2 Technical Specification Bases for Sections 3.8.4 and 3.8.9 to reflect the NRC approved corresponding changes for the replacement of 125 VDC AT&T batteries with the new 125 VDC C&D batteries while Unit 2 is online.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because in the approval of the Amendment No. 99 it was concluded that the technical changes did not affect the any accident initiators, precursors or alter the design assumptions for the systems or components used to mitigate the consequences of an accident as analyzed in the UFSAR Chapter 15. Since this Bases change merely expands on the description of the technical changes made so as to facilitate the readers' understanding of the approved LCOs and surveillance, these changes also will not increase the consequences of any accident or transient. The bases changes are necessary for the implementation of Amendment No. 99 and are bounded by the NRC SER. Likewise the possibility of a malfunction of equipment important to safety was shown not to exist by virtue of acceptance by the NRC, therefore this conclusion is not altered as a result of this change.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because this Bases change does not affect any accident initiators or precursors and do not alter the design assumptions for the systems or components as analyzed in the UFSAR Chapter 15 by virtue of their supporting or reflecting role. Since the changes in the Technical Specifications Amendment No. 99 were concluded to be incompliance with the Commissions' regulations, the same can be concluded for the Bases changes as well. Therefore the possibility of an accident or transient of a different type than previously evaluated does not exist.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because the changes being made to the Bases are administrative in nature in that they provide the justification or explanations supporting the changes in Amendment 99 of the Braidwood Technical Specifications. The actual Technical Specification changes have been reviewed and approved by the NRC, this changes merely supports those changes.

UFSAR REVISION

UFSAR Draft Revision Package 7-235

DESCRIPTION

The purpose of this UFSAR Revision was to update various Radiation Protection information in UFSAR Section 2, 11, 12, 13, Appendix E and Tables 11.5-2, 12.3-9, 12.5-1, 12.5-2, 12.5-3.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because the proposed changes reflect current RP program practices, instruments, organizational structure, location of RP facilities, and methods of regulatory compliance. The changes do not affect plant equipment or operation. There are no accidents or malfunctions of equipment important to safety as previously evaluated impacted by these changes.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because the proposed changes reflect current RP program practices, instruments, organizational structure, location of RP facilities, and methods of regulatory compliance. The changes do not affect plant equipment or operation. There is no new accident or malfunctions created by these changes.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because this activity does not affect any parameters upon which the Technical Specifications are based.

PROCEDURE REVISION

BwOP RC-19
BwOP RC-19T1

DESCRIPTION

The purpose of these Procedure Revisions was to delete BwOP RC-19T1 and make the following changes in BwOP RC-19: change the cold calibration level in the Pressurizer to 70%; change the Chemical and Volume Control (CV) lineup to delete closing CV121; lower Reactor Coolant System (RCS) pressure to 340 psig prior to starting a Reactor Coolant Pump; and add steps to allow the use of a vacuum pump or an air ejector. The procedure changes supported the vacuum fill of the RCS during a refueling outage.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because the procedure revision for vacuum fill will enhance the RCS fill operation. The proposed changes do not impact the operation of safety related equipment. The RCS boundary core cooling, core reactivity and operation of Residual Heat Removal will not be affected.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because the proposed revisions do not impact the operation of any safety related systems. Any stresses experienced by the RCS under vacuum conditions are significantly smaller than stresses experienced during normal operating conditions. If vacuum seals were to fail, the RCS piping of the isolated looper pressurizer air space would return to atmospheric pressure conditions.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because this activity does not affect any parameters upon which the Technical Specifications are based.

ENGINEERING REQUEST

9900643
9702240

DESCRIPTION

The purpose of these Engineering Requests was to install freeze seals on the Essential Service Water (SX) System supply and return lines to the Unit 2A Chemical and Volume Control (CV) Pump gear cooler and lube oil cooler to repair valve 2SX2198A.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because the freeze seals have the same affect on the plant equipment as closing the SX isolation valves to the gear and lube oil coolers. The additional weight and flooding were evaluated and are not a concern, and there is no effect on overall SX System flow. The SX System is also not a radiological barrier. The work will be performed when the Unit 2A CV Pump is Out-of-Service.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because the freeze seals have the same affect on the plant equipment as closing the SX isolation valves to the gear and lube oil coolers. The additional weight and flooding were evaluated and are not a concern, and there is no effect on overall SX System flow. The work will be performed when the Unit 2A CV Pump is Out-of-Service.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because the freeze seals have the same affect on the plant equipment as closing the SX isolation valves to the gear and lube oil coolers. There is no impact on the SX System that would reduce its margin of safety from the installation of these freeze seals. The Unit 2 ECCS "B" train systems shall be operable to meet Technical Specification requirements should the freeze seal fail and cause the Unit 2 ECCS "A" train coolers to be isolated from SX flow.

UFSAR REVISION

UFSAR Draft Revision Package 7-253

DESCRIPTION

The purpose of this UFSAR Revision was to correct configuration and design data and provide clarifying information related to the Diesel Generators. The jacket water, lube oil, and starting air subsystem descriptions are impacted by this revision to the UFSAR.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because these changes merely correct configuration, design, and performance data and clarify Station operational policies based on factual information consistent with the currently installed equipment, policies and procedures. The changes do not introduce any new operational limitations for the affected engine subsystems, nor do they challenge the availability of the Diesel Generators. A complete malfunction of a Diesel Generator that results in the loss of a single train to mitigate the consequences of an accident is the most limiting failure considered for a Diesel Generator. All Diesel Generators remain reliable sources of emergency power and no new failure mechanisms are introduced by the changes being made under Draft Revision Package (DRP) 7-253. Therefore, there is no possibility that these changes to the UFSAR can create an accident or transient different from those currently evaluated in the UFSAR.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because these changes only reflect correct engine design and performance data and physical configuration to match the as-designed/as-built configuration in the plant. The changes are administrative in nature only and do not change any operational or performance characteristic of the Diesel Generators. There are no impacts on interfacing equipment important to safety introduced under this DRP. Therefore, DRP 7-253 cannot introduce or create a malfunction different than that previously evaluated.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because the implementation of DRP 7-253 does not challenge the reliability or availability of the Diesel Generators as a source of AC power and therefore does not reduce the margin of safety as described in the Bases of Technical Specifications and supporting documents.

DESIGN CHANGE

D20-1-96-282-002
D20-2-96-282-003

DESCRIPTION

The purpose of this Design Change was to replace the Westinghouse AR3 relays with Westinghouse DC contactors in the 4 Kv electrical feed breaker closing control circuitry for Containment Spray (CS) System pumps 1CS01PA/B and 2CS01PA/B.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because the replacement of the existing AR3 relays with DC contactors will preclude contact failures without having any adverse affect on the CS System or any other plant systems.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because the installation of the DC contactors will not adversely impact any systems or functions. The intent of these changes is to preclude relay contact failures due to overcurrent conditions. No new accident scenarios are created as a result of this change. These changes will not alter any wording, drawings, initial conditions or assumptions utilized in the UFSAR analysis, alter plant operation in any modes, or create any new failure modes. Therefore, the UFSAR analysis remains unchanged and bounding.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because this activity does not affect any parameters upon which Technical Specifications are based.

NUCLEAR WORK REQUEST (NWR)

970080663

DESCRIPTION

The purpose of this Nuclear Work Request was to perform an inspection of the demineralizer vault for the Unit 2 Chemical and Volume Control (CV) System Cation Demineralizer. To perform this work, a floor plug had to be removed to allow the routing of equipment. This floor plug is considered part of a ventilation boundary.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because the Auxiliary Building Ventilation (VA) System will not be prevented from performing its intended safety function to filter radioactive iodine prior to release to the environment. The probability of a malfunction of equipment important to safety or the consequences of a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because in this case as with the previous activity, environmental qualification zones or equipment temperature limits of equipment that is important to safety will not be affected.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because the HVAC impairment is temporary and of short duration. The flow of air will be into the demineralizer vault from the Auxiliary Building general area to the Auxiliary Building exhaust plenum. The VA System will not be bypassed.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because this activity does not affect any parameters upon which the Technical Specifications are based.

UFSAR REVISION

UFSAR Draft Revision Package 8-073

DESCRIPTION

The purpose of this UFSAR Revision was to reflect the upgrading of the seismic monitoring instrumentation and the new equipment that was installed.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because the seismic monitoring instrumentation does not interact with other plant systems in a manner that could cause an accident or plant transient. The replacement of the existing seismic monitoring instrumentation will not increase the probability of an accident or plant transient. The replacement of the existing seismic monitoring instrumentation will not increase the probability of an accident or plant transient. The seismic monitoring instrumentation does not interface the any SSCs relied upon to keep the offsite dose within 10CFR100 limits, for accident or plant transients that have potential radiological consequences. Any potential interactions between the replacement equipment and other SSCs have been considered in the design process. The replacement system has been tested to demonstrate its acceptability in terms of conducted or rediated emissions (potential effect on adjacent plant equipment), as well as its susceptibility to electromagnetic interference. The testing demonstrated that the replacement system would not affect equipment important to safety in the vicinity of 0PA02J.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because the new equipment is equivalent in design and function to the previous system. It does not provide interaction with any safety related system. It is not used for accident mitigation.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because this activity does not affect any parameters upon which the Technical Specifications are based.

DESIGN CHANGE

D20-0-99-308-001-through 007

DESCRIPTION

The purpose of these Design Changes was to improve the Chemical Feed (CF) System originally installed under Modification M20-0-95-003. These changes include replacing tube/hose fittings at locations prone to leakage or failure, rerouting CF piping to improve personnel access to the chemical feed skids, providing hard PVC piping to replace tygon hoses used to direct vented system effluents to a collection container, and installing flanges on the chemical injection pump inlets and outlets to facilitate maintenance on the pumps.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because the referenced safety evaluation previously evaluated the installation of the chemical injection system for the Essential Service Water (SX), Non-Essential Service Water (WS), and Circulating Water (CW) Systems. The proposed activities involve physical improvements to the original installation without introducing any new functional or operational changes to the system. No new failure modes are introduced by these changes.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because the installation of the chemical injection system does not adversely impact any other station equipment or interfacing systems. The current activities similarly ensure that no new failure mechanism or mode is created which could introduce an accident or malfunction different than currently evaluated in the SAR.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because this activity does not affect any parameters upon which the Technical Specifications are based.

DESIGN CHANGE TEST

E20-2-97-203-1
E20-2-97-203-2

DESCRIPTION

The purpose of these Design Change Tests were to verify proper operation of newly installed time delay relay in the logic for the autostart of the standby Component Cooling Water (CC) Pump on low discharge header pressure. The tests will autostart the train and Common Component Cooling Water Pumps (individually) by inputting an artificial low signal to the pressure switch, and verifying the associated results occur after the correct time delay.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because the CC System will be operated per normal operating procedures and the low pressure condition simulated. Only one train of CC is required for the system to perform its normal and post-accident function, and one train will be unaffected by this test. This test is to be performed in Modes 5, 6 or defueled.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because the Component Cooling Water System design, functions, and operation remain unaffected by the performance of this test. Component Cooling Water Pump operation will be within normal operating bands.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because the function and operation of the CC System is not changed by the performance of this test. This activity does not affect any parameters upon which the Technical Specifications are based.

ENGINEERING REQUEST

9900566

DESCRIPTION

The purpose of this Engineering Request was to install a freeze seal on the 2 inch Safety Injections lines 2SI18EC and 2SI18FC to provide isolation for the replacement of check valve 2SI8819C.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because the temporary freeze plugging to replace the check valve will be done with the SI System and related equipment placed out of service (OOS). The freeze plugging of these lines will be done per the applicable approved Station procedures. The affect of a line freeze on piping systems has been evaluated and found acceptable.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because the freeze plugging will be performed when Unit 2 is in Modes 5, 6 or defueled which does not require the SI System to be operable. All related equipment will be OOS during this activity.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because this activity does not affect any parameters upon which the Technical Specifications are based.

DOCUMENT CHANGE REQUEST

990074

DESCRIPTION

The purpose of this Document Change Request (DCR) was to correct the piping design table reference for valves 0WM917 and 0WM919 in the Electronic Work Control System (EWCS). Piping design flags were added to drawing M-49, sheets 1A and 1B near the 0WM011PA and PB pumps. Valve 1WM226 was changed from normally open to normally closed on drawing M-49, sheet 1A.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because these changes are confined to the non-safety related portions of the Demineralized Water (WM) System. These components are not related to any equipment used to mitigate the consequences of any accident. The changes are administrative in nature and do not alter equipment in the field.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because these changes affect only non-safety related portions of the WM System. No new accidents are created. There are no physical changes to the design of the plant as reflected in the UFSAR. Maintaining 1WM226 in the closed position provides better physical separation of the WM and Condensate Systems.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because this activity does not affect any parameters upon which the Technical Specifications are based.

NUCLEAR WORK REQUEST (NWR)

970107250-01

DESCRIPTION

The purpose of this Nuclear Work Request was to require the propping open of doors D-246, D-254 and D-844 in order to perform a freeze seal, cleaning and inspection of the 2B Residual Heat Removal (RH) Pump cubicle cooler. The Plant Barrier Impairment (PBI) program will be implemented to ensure all UFSAR and Technical Specification requirements are met. During the time the doors are propped open, the 2B RH Pump will be isolated and unavailable. The ventilation effects will be evaluated for the 2A/2B Containment Spray (CS) Pump rooms and the 2A/2B RH Pump rooms due to the doors being propped open.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because the Auxiliary Building will be required to maintain at least –0.3 inches of water during this work. This will satisfy the requirement for the ECCS Pump rooms and CS rooms to maintain a minimum of –0.25 inches of water with respect to outside atmosphere. Administrative controls are in place to ensure all EQ, ALARA and flooding issues are met and remain bounded by the existing analysis.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because this work does not have an impact on the events which initiate a LOCA or a radioactive release accident. All UFSAR requirements were met. This activity isolated Essential Service Water (SX) to the cubicle cooler. Normal operation of the SX System is not affected.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because all Technical Specification requirements were met during this activity.

DESIGN CHANGE TEST

E20-97-202-1

DESCRIPTION

The purpose of this Design Change Test was to 1) ensure that the installation of the design change not adversely affected the operation of MOV 2CC685, and 2) verify that this design change has resolved the original problem of inadvertent closure of MOV 2CC685 upon the start of a second Component Cooling Water (CC) Pump. The test will cycle 2CC685 both with the control switch and its Phase B contact. In addition, a second CC Pump will be started to verify that 2CC685 does not close.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because manipulation of the Component Cooling Water System during this procedure cannot initiate an accident or transient. Temporary isolation of CC from the Reactor Coolant Pump (RCP) thermal barrier heat exchanger will not adversely affect any operating RCPs, should it occur. Planned cycling of 2CC685 will be performed with no RCPs in operation. The CC System is available to perform its normal and post-accident function as required to support plant operation.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because the overall operation of the CC System will be per normal operating procedures. Loss of CC flow to the RCP thermal barrier heat exchangers is discussed in the UFSAR. Stroking of valve MOV 2CC685 is not going to adversely affect the valve, as it is routinely stroked for surveillance testing.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because this activity does not affect any parameter upon which the Technical Specifications are based.

TEMPORARY MODIFICATION

99-2-008

DESCRIPTION

The purpose of this Temporary Modification (TMOD) was to install a switched electrical jumper around the Reactor Trip Breaker (RTB) failed Shunt Trip Attachment (STA) pushbutton (2HS-RD010), allowing the breaker to shut. This does not prevent the breaker from tripping open under any conditions, but a manual trip will require opening the jumper switch or removing the jumper, instead of actuation of the STA pushbutton.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because there is no impact on the ability of the RTB function (open/trip) due to the addition of this jumper. The jumper replaces the circuit continuity of the failed switch. The probability of the jumper failing is considered less than or equal to that of the switch failure, thus the probability of occurrence is not increased.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because the jumper installed performs the same function as the STA pushbutton. No other accidents or malfunctions are postulated for the jumper wire which adversely affect the SAR evaluations. A malfunction of the jumper is considered to be either open or shorted, and a short is the same condition as normal operations. An open will cause the shunt trip to deenergize and cause the RTBs to open, inserting all rods (most conservative).

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because the jumper performs the same function as the failed switch. This activity does not affect any parameters upon which the Technical Specifications are based.

PROCEDURE REVISION

BwVP 200-27

DESCRIPTION

The purpose of this Procedure Revision was to set the proper throttle position for the pressurizer spray bypass valves.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because the procedural manipulation of the Pressurizer heaters and spray valves is within the assumed normal operation of the Pressurizer pressure control function. The procedure provides the necessary guidance to prevent undesired pressure changes on the unit.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because the procedure provides the necessary guidance to establish the desired spray valve bypass valve setting according to the original plant design. All procedural activities are in accordance with the assumed normal operation of the Pressurizer in the manual mode. The procedure does not impact any functions relied upon to mitigate transients.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because this procedure does not impact any Technical Specifications or Bases. Operation of the Pressurizer remains within the assumed normal operating parameters.

MODIFICATION TEST

E20-2-97-312-1

DESCRIPTION

The purpose of this Modification Test was to change the trim and stroke length of the eight Unit 2 air operated Auxiliary Feedwater (AF) flow control valves (2AF-005A-H). These changes are necessary to ensure that the AF System meets the design flow requirements in all design bases. A similar design change was installed and tested on unit 1. The modification test verifies the following: 1) performance of the motor and diesel driven AF Pumps, 2) single and dual branch line flows through the control valves in their failed open position are within the limits required to meet the most limiting accident conditions, and 3) the control valves can be stroked from the control room with the AF pumps operating in the recirculation mode. The test will be performed in mode 5, 6 or defueled when the AF System is not required to be operable.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because in modes 5, 6 or defueled, when the modification test will be performed, there is no consequences to any of the accidents requiring the AF System except the "Loss of Non-Emergency AC Power to the Plant Auxiliaries", "Steam Generator Tube Rupture" and "Loss of Coolant Accidents Resulting From a Spectrum of Postulated Piping Breaks Within the Reactor Coolant Pressure Boundary." For these 3 accidents, the AF System would not be used for mitigation. The Loss of Coolant Accident and Steam Generator Tube Rupture would be addressed using the ECCS Systems. The loss of Non-emergency AC Power would be dealt with using features of the Auxiliary Power System. Therefore, having the AF System in an abnormal configuration for testing purposes would not increase the consequences of these accidents should they occur. Again, the Chapter 15 analysis for these events considers "at power" conditions and not cold shutdown conditions.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because the modification test will flow water to the Steam Generators from the AF System during shutdown or refueling conditions. The secondary side of the steam generators will be protected as follows: 1) steam generator pressure and temperature limitations will be followed as described in TRM 3.7.a, 2) chemistry will be notified prior to adding water to the Steam Generators to ensure any secondary side water chemistry issues or concerns are addressed, and 3) the test will be stopped if any Steam Generator wide range level reaches 95% to prevent putting water into the Main Steam lines.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because the test will only be performed in modes 5, 6 or defueled. The AF System is not required to be operable in these modes.

TEMPORARY MODIFICATION

99-1-010

DESCRIPTION

The purpose of this Temporary Modification (TMOD) was to install ultrasonic feedwater flow instrumentation upstream of the flow venturis in the Unit 1 Steam Tunnel. The brackets for the ultrasonic transducers require the removal of approximately 3' of insulation to support their installation and scaffolding installed to access the affected lines. Data acquisition equipment will be located near the transducer brackets on a portable cabinet or cart. Installation of the transducer bracket and interconnecting data acquisition equipment is controlled under this TMOD.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because this activity maintains the normal operation of the system, is non-intrusive, and there is no impact on any interfacing equipment or components.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because there is no change in the operation of any equipment created by this activity. This activity has been reviewed for potential impacts due to material compatibility, seismic, mechanical, thermal, environmental, and emitted radiation (electromagnetic) source considerations. No new failure modes or mechanisms are introduced by this activity.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because this activity does not affect any parameters upon which the Technical Specifications are based.

NUCLEAR WORK REQUEST (NWR)

980032686

DESCRIPTION

The purpose of this Nuclear Work Request was to install a freeze seal on line 2CC48BB. To perform this work, Door D-314 had to be propped open to allow the routing of hoses. This door is considered to be part of the ventilation boundary.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because the Auxiliary Building Ventilation (VA) System does not initiate or alter the initial conditions of any accident. The accident mitigation function of the VA System to maintain the Auxiliary Building at a negative pressure to filter and control the release of radioactively contaminated air is not affected. The increases in room temperature have been found acceptable during VA two fan operation and the proposed activity is not being performed during a time when environmental qualification temperatures may be exceeded due to outside temperatures when in the abnormal fan operation.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because the Auxiliary Building ventilation System is unrelated to the sequence of events leading to the initiation of an accident. The possibility of an accident or malfunction of equipment of a different type from those evaluated in the SAR is not created since the system's accident and normal functions will be maintained.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because this activity does not affect any parameters upon which the Technical Specifications are based.

ENGINEERING REQUEST

ER9900625
ER9900626

DESCRIPTION

The purpose of these Engineering Requests was to perform a freeze seal on the 2 inch Safety Injection (SI) lines to provide isolation for the replacement of check valves 2SI8905A-D.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because temporary freeze seals to replace the check valves will be done with the SI System and related equipment placed out-of-service (OOS). The freeze seals on these lines will be done per the applicable approved procedures. The affect of a line freeze on the piping systems have been evaluated and found acceptable.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because the freeze seals will be performed when Unit 2 is in modes 5, 6 or defueled which does not require the SI System to be operable. All related equipment will be OOS during this activity.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because the affected SI System and the related equipment will be OOS during the freeze seals on the SI lines. These lines are evaluated for stresses due to freeze seals and were found acceptable.

SPECIAL PROCESS PROCEDURE

SPP 99-024

DESCRIPTION

The purpose of this Special Process Procedure (SPP) was to pressurize the line between the Pressurizer auxiliary spray isolation vale and the Pressurizer auxiliary spry check valve. The method by which this will be accomplished is to perform a partial stroke of valve 2CV8145 through manual operation of the local air isolation valve on the Instrument Air (IA) supply line to 2CV8145. The partial stroke will allow charging header pressure to Pressurize the line. After the auxiliary spray valve is closed, the downstream line pressure will equalize with pressure in the Pressurizer spray line. The procedure will transfer a small amount of auxiliary spray water into the Pressurizer. The water will be somewhat cooler than normal spray, introducing a fluctuation in Pressurizer pressure. Because of the expected decrease in Pressurizer pressure, the initial steps of the procedure will increase Pressurizer pressure from a nominal 2235 psig to 2250 psig. Pressure will then be returned to 2235 psig at the conclusion of the test.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because the probability of the occurrence of the design basis auxiliary spray transient is not increased due to the controls and limits in the procedure. The Chapter 15 accidents as a whole assume a Pressurizer pressure variation of +/-43 psi from nominal system pressure as initial conditions for accident analysis. The Pressurizer pressure values expected in performance of this procedure are well within this boundary. A number of plant abnormal and emergency operating procedures direct the use of the auxiliary spray valve to control Pressurizer pressure when the normal spray valves are not available. None of these procedures requires operation of the auxiliary spray valve immediately upon entry into the procedure. Performance of this test is not expected to produce any malfunctions or adversely affect any equipment important to safety.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because the thermal sleeves on the Pressurizer spray connection and the spray piping are designed to withstand the thermal stresses resulting from the introduction of cold spray water. The Pressurizer pressure control system maintains or restores the Pressurizer pressure.to the design pressure +/-30 psi following normal operational transients that induce pressure changes.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because operation of the Pressurizer will remain within the assumed normal operating parameters at all times. Introduction of a small amount of auxiliary spray does not affect the margin of safety of any Technical Specifications.

SPECIAL PROCESS PROCEDUE

SPP 99-023

DESCRIPTION

The purpose of this Special Process Procedure (SPP) was to be used in conjunction with surveillance BwVS TRM 3.4.F.2-3.1 to pressurize the Class 1 piping section between normally closed valves 2RH8701A and 2RH8701B. During the pressure test a visual exam will be performed on the piping for leakage after a hold time of 4 hours. This test will be performed in Modes 1, 2, or 3 with the Reactor Coolant System (RCS) at nominal operating pressure. A test pump will be connected to the section of piping between the 2RH8701A and 2RH8701B valves through an installed vent valve 2RH014A. The test pump will be used to increase the pressure in the piping section to between 2220 and 2240 psig. The test pump suction source will be from a container of borated water with a boron concentration greater than 2300 ppm to prevent RCS dilution concerns.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because in the likely event that water is added to the RCS from the test pump assembly a dilution would not occur due to the boron concentration of the injected water being greater than 2300 ppm. Additionally, overpressure protection devices on the RCS piping would not allow an overpressure compared to the RCS volume. The test pump assembly relief valve will provide another source of protection for overpressure and the borated water container will limit the amount of water that could be injected into the RCS.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because the test volume is being pressurized to approximately RCS pressure and this will only require a small amount of water to be added to the test volume due to it being a water solid section of pipe. The test volume pressure will be controlled throughout the test to prevent overpressurization of the tested piping. The supply container will limit the volume of water used and provide an indicator as to how much is being injected.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because this test does not affect the basis of any Technical Specification and therefore, will not reduce the margin of safety for any Technical Specification.

CORE OPERATING LIMITS REPORT REVISION

Unit 2, Cycle 7

DESCRIPTION

The purpose of this Core Operating Limits Report (COLR) Revision was to revise the Unit 2 Cycle 7 COLR Section 2.4.3 to allow for control bank overlap accuracy uncertainties (± 6 steps) accounted for, and revise the limit to be 113 steps ± 1 step.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because the accidents affected were revised in the original safety analysis. An approved calculation verified the deviation of overlaps of ± 1 step would not impact any of the safety analyses.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because this change does not affect systems or functions of the plant, or plant operation processes. As such no new accidents or malfunctions were created.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because the margins were shown to operate within the safety analyses acceptance limits, therefore the safety margins have been maintained.

DESIGN CHANGE

9800102
9800103

DESCRIPTION

The purpose of these Design Changes were to rewire the close and open control circuits for 1/2RY8000A and 1/2RY8000B (Pressurizer Power Operated Relief Valve (PORV) block valves) so that the limit switch and torque switch contacts in the circuits are between the Main Control Room switches and the contactor coils. The existing control logic for the valves will not be changed by the installation of the design changes. The revised circuit configuration will rearrange the connections to the limit switches and torque switches such that the valve circuit will be interrupted by switches preventing damage to the MOVs in the event of spurious operation from a Main Control Room fire.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because although the circuit design is being changed, there is no change in the operation of the circuit, the block valves, any plant systems or the plant overall. Since the existing circuit components are still being used in the same manner, the probability of a failure to the components, circuit or the valves is not changed. The block valves are not considered to initiate any accidents. Since the operation of the plant and components has not changed, the response to accidents will not be changed.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because the changes to the arrangement of the circuit components do not alter the operation of the circuit or the valve. The change uses the existing components and does not add any new components to the circuit. All of the circuit components will be used in the manner they are currently used. None of the components will be required to perform any new functions. The change does not change the operation of the valves. The change does not create any interaction with the block valve's associated PORV or it's control circuit that could cause a failure of the PORV.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because the operation of the block valves and associated PORVs are not changed. The ability of the valves to perform their functions is not affected by the changes to the control circuits. There are no changes to the block valves that affect their ability to isolate the associated PORV or reduce the flow through the relief path. The changes to the control circuit will not affect the stroke time of the valve. The position indication provided for the block valves is not affected by the changes to the control circuit. There is no impact on the PORVs and their control circuits.

TECHNICAL REQUIREMENTS MANUAL

TRM Revision 3

DESCRIPTION

The purpose of this Technical Requirements Manual (TRM) was to make the following changes to TRM Limiting Condition of Operation (TLCO) 3.3.y, "Engineered Safety Features Actuation System (ESFAS) Instrumentation": 1) eliminate the plant shutdown requirement associated with inoperability of an Auxiliary Feedwater (AF) manual initiation channel and instead require immediate entry into TLCO 3.0.c, and 2) extend the Completion Time for restoration of an inoperable AF manual initiation channel from 48 hours to 72 hours consistent with TS LCO 3.7.5, "AF System".

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because operation of the AF System is not considered an initiator or an initiating condition for any Design Bases Accident or transient. Extending the time available to complete repairs of an inoperable component does not have a detrimental impact on the integrity of plant components nor does it increase the probability that these components will fail. The consequences of any accident or transient are dependent on the initial conditions assumed for the analysis, and the availability and successful functioning of equipment assumed to operate in response to the analyzed event, and the setpoints at which their actions are initiated. Manual initiation of the AF System is not modeled in any safety analysis. Automatic actuation of the AF System is assumed.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because these changes do not involve a physical alteration of the plant. No new equipment is being introduced, and installed SSCs are not being operated in a new or different manner. There is no change being made to process parameters within which the plant is operated. There are no setpoints, at which protective or mitigative actions are initiated, affected by this change. This change will not alter the manner in which equipment operation is assumed to be initiated in accident analysis nor will the function demands on credited equipment be changed.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because operability of the AF System is addressed by Technical Specification LCO 3.7.5, "Auxiliary Feedwater System," and the proposed changes to TRM TLCO 3.3.y have no impact on the Bases of TS LCO 3.7.5.

SPECIAL PROCESS PROCEDURE

SPP 99-021 Revision 0

DESCRIPTION

The purpose of this Special Process Procedure (SPP) was to perform the required ASME Section XI, 1983 Edition with 1983 Summer Addenda, 10 year system pressure test of portions of the reactor head vent piping.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because this procedure provides the actions that must be taken in the event excessive external leakage were to occur during the execution of the test. The test will be terminated if excessive leakage were to occur. The test is conservatively written to allow opening of only one valve at a time. The piping connection on the reactor vessel that supplies the reactor head vent system is 1 inch in diameter. Therefore, no piping or components associated with this test is of a size that requires a LOCA analysis. The test is conducted at RCS pressure associated with that of normal operation. The piping and components that are to be subjected to pressure testing are designed for maximum RCS pressure. This is not a hydrostatic test that requires the introduction of elevated test pressures into the system so no new equipment is being introduced to the system.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because the components that are being tested are designed to withstand the RCS pressures associated with 100% reactor power. No new equipment is being introduced in the system. No new unanalyzed operating parameters are introduced. The maximum diameter of the components being subjected to the test pressure is 1 inch. Manual valve 2RC015 and 2RC8070 will be in constant attendance and vale 2RC014B can be manipulated (closed) immediately from the control room at all times. The opposite vent path train can be restored to an operable condition at any time. In addition, at all times at least one Class 1 boundary will be closed providing a reactor coolant pressure boundary. In the event excessive leakage were to occur, the valve can be immediately closed as required.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because the piping and components that are being subjected to testing are all equal to or under 1 inch in diameter. In the event external leakage up to and including that created through a piping rupture or break is experienced, the Emergency Core Cooling System make up capabilities are more than adequate to compensate for the lost reactor coolant inventory. The test is conducted at RCS pressure associated with that of normal operation. The piping and components that are to be subjected to pressure testing are designed for maximum RCS pressure. Preplanned contingency actions are in place in the event excessive leakage were to occur.

SPECIAL PROCESS PROCEDURE

SPP 99-021 Revision 1

DESCRIPTION

The purpose of this Special Process Procedure (SPP) was to perform the required ASME Section XI, 1983 Edition with 1983 Summer Addenda, 10 year system pressure test of portions of the reactor head vent piping.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because this procedure provides the actions that must be taken in the event excessive external leakage were to occur during the execution of the test. The test will be terminated if excessive leakage were to occur. The test is conservatively written to allow opening of only one valve at a time. The piping connection on the reactor vessel that supplies the reactor head vent system is 1 inch in diameter. Therefore, no piping or components associated with this test is of a size that requires a LOCA analysis. The test is conducted at RCS pressure associated with that of normal operation. The piping and components that are to be subjected to pressure testing are designed for maximum RCS pressure. This is not a hydrostatic test that requires the introduction of elevated test pressures into the system so no new equipment is being introduced to the system.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because the components that are being tested are designed to withstand the RCS pressures associated with 100% reactor power. No new equipment is being introduced in the system. No new unanalyzed operating parameters are introduced. The maximum diameter of the components being subjected to the test pressure is 1 inch. Manual valve 2RC015 and 2RC8070 will be in constant attendance and vale 2RC014B can be manipulated (closed) immediately from the control room at all times. The opposite vent path train can be restored to an operable condition at any time. In addition, at all times at least one Class 1 boundary will be closed providing a reactor coolant pressure boundary. In the event excessive leakage were to occur, the valve can be immediately closed as required.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because the piping and components that are being subjected to testing are all equal to or under 1 inch in diameter. In the event external leakage up to and including that created through a piping rupture or break is experienced, the Emergency Core Cooling System make up capabilities are more than adequate to compensate for the lost reactor coolant inventory. The test is conducted at RCS pressure associated with that of normal operation. The piping and components that are to be subjected to pressure testing are designed for maximum RCS pressure. Preplanned contingency actions are in place in the event excessive leakage were to occur.

ENGINEERING REQUEST

ER9900704
ER9900705
ER9900749

DESCRIPTION

The purpose of these Engineering Requests (ER) was to provide isolation for maintenance activities on valves 2SI8810A, C, and D to freeze plug the high head Safety Injection (SI) lines 2SI08JA, 2SI08HC/JC and 2SI08HD.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because the temporary freeze plugging for the high head safety injection lines will be done to provide a secondary isolation for maintenance activities on the subject valves. In the defueled mode with the SI and related equipment placed out-of-service. The freeze plugging of these lines will be done per the applicable approved procedures. The affected piping systems have been evaluated and found acceptable.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because the freeze plugging will be performed when Unit 2 is in the defuelded mode which does not require the high head Safety Injection System to be operable. All related equipment will be OOS during this activity.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because the affected high head Safety Injection System and the related equipment will be OOS during the freeze plugging of these lines. These lines are evaluated for stresses due to freeze plugging and found acceptable. The Unit will be in a defueled condition during this activity.

TEMPORARY MODIFICATION

TMOD 99-2-011

DESCRIPTION

The purpose of this Temporary Modification (TMOD) was to provide an alternate source of 480 Vac power to the constant voltage transformers (CVTs) for Instrument Buses 212 and 214 from Turbine Building MCC 234Y3. Providing 480 Vac power to these transformers will allow Instrument Buses 212 and 214 to remain energized during the planned outage of ESF 4160 V Bus 242. The normal power feeds to the CVTs from ESF Motor Control Centers (MCCs) 232X1 and 232X3 will be deenergized during the Bus 242 outage.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because the temporary feed to the CVTs for Instrument Buses 212 and 214 will be installed when Unit 2 is in Mode 6, or defueled. The TMOD will not increase the probability of an unplanned dilution event or a fuel handling accident inside containment. The TMOD does not create any new interfaces with the SSCs required to maintain the consequences within acceptable limits for the above postulated events. Providing a temporary source of power to the affected instrument buses will enhance the availability of plant equipment required for Mode 6 refueling activities during the outage on Bus 242.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because physical and functional interfaces between the Instrument Power System and plant SSCs downstream of the constant voltage transformers are not being changed. Implementation of this TMOD will not result in the creation of any new accident or plant transient that has not been previously analyzed. The TMOD will ensure that their associated Instrument Buses associated with Division 22 are available to support plant equipment that is required during refueling activities concurrent with the Bus 242 outage. This will assist in minimizing the shutdown risk associated with refueling activities. The electrical distribution subsystems that comprise Division 21 will be operable for all of the required equipment during the outage on Bus 242. This change will not impact the ability of this equipment to perform its safety function.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because this change provides 480 Vac power to CVTs for Instrument Buses 212 and 214 from an alternate source of non-safety related power. The temporary change to the plant is consistent with the criteria that was used in the development of the requirements, associated action items, associated surveillances, and bases for the Technical Specification sections related to AC sources during Modes 5 and 6. Thus, the margin of safety is not reduced.

DESIGN CHANGE

E20-2-96-261

DESCRIPTION

The purpose of this Design Change was to replace the existing Diesel Generator Fuel Oil Filter/Strainer assemblies and their associated integral transfer (selector) valves with a design recommended by the Cooper-Bessemer Owners Group. The new design is less prone to fuel oil leakage and is easier to maintain.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because the changes don't introduce any new operational limitations for the affected Diesel Generators and associated subsystems, nor do they challenge the availability of the Diesel Generators. A complete malfunction of a Diesel Generator that results in the loss of a single train to mitigate the consequences of an accident is the most limiting failure considered for a Diesel Generator. All Diesel Generators remain reliable sources of emergency power and no new failure mechanisms are introduced by the changes being made under this Design Change. Therefore, there is no possibility that these changes can create an accident or transient different from those currently evaluated in the UFSAR.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because the proposed changes will have no impact on equipment failures. The changes only enhance engine material condition and reliability and do not change any operational or performance characteristic of the Diesel Generators. There are no impacts on interfacing equipment important to safety introduced under this Design Change.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because Technical Specifications 3.8.1, 3.8.2, and 3.8.3 ensure that a reliable source of emergency power is available to equipment necessary to mitigate the consequences of abnormal operating occurrences, accidents, or transients. The implementation of this Design Change does not challenge the reliability or availability of the Diesel Generators as a source of AC power and therefore does not reduce the margin of safety as described in the bases of Technical Specifications and supporting documents.

PROCEDURE REVISION

BwRP 5820-5T1

DESCRIPTION

The purpose of this Procedure Revision was to change the setpoints for the 2AR011 and 2AR012 radiation monitors to 10 mR/hr above background.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because the setpoint changes are digital in nature and the equipment will operate exactly as before the setpoint change.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because the setpoint changes are digital in nature and the equipment will operate exactly as before the setpoint change. No new equipment was added to the plant. The radiation monitors maintain the same function as before the change.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because the monitors will still be able to detect the 10 mR/hr submersion dose rate inside containment.

ABNORMAL SYSTEM LINE-UP

DESCRIPTION

The purpose of this Abnormal System Line-up was to allow the Turbine Floor Drain (TF), Turbine Equipment Drain (TE) and Liquid Radwaste (WX) Systems to continue processing water during the Turbine Building Instrument Air (IA) out-of-service and Bus 244 outage during refueling outage A2R07.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because the systems were still operated in essentially the same manner. Local valve operation was required due to the loss of IA. All operations were performed in accordance with approved Station procedures. Operation of the systems with an abnormal line-up does not increase the probability of occurrence or consequences of an accident or malfunction.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because these systems were still operated in essentially the same manner. TE and TF are waste water collection systems for the Turbine Building. The WX System processes water and Steam Generator Blowdown. The systems were operated in accordance with approved station procedures. Operation of the system in essentially the same manner does not create the possibility of an accident or a malfunction of a different type.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because this activity does not affect any parameter upon which the Technical Specifications are based.

PLANT BARRIER IMPAIRMENT

DESCRIPTION

During reactor refueling outage times, extensive numbers of plant barrier impairment (PBI) permits are initiated to support the outage work scope. The bulk of these permits are due to routing cables, hoses, temporary lighting, etc. from the Auxiliary Building general areas and/or Fuel Handling Building general areas into certain rooms through doors. A review of past PBI evaluations (50.59) have shown no HVAC concerns exist on either the operating Unit and the Unit in the refueling outage. Most of the doors have balancing dampers or access openings located above the doors indicating the doors are considered and HVAC boundary. According to the PBI process, many safety evaluations are performed to evaluate opening each door. The purpose of this evaluation was to help steamline the PBI process by evaluating certain doors to be propped open on the Unit while in mode 5, 6, or defueled and ensuring all Auxiliary Building Ventilation (VA) UFSAR and Technical Specification requirements are met.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because the accident mitigation function and normal functions of the VA System will still continue to maintain the building at a negative pressure, control post accident radioactivity leaking from the ECCS equipment within required limits, and maintain environmental qualification zone requirements for the affected areas that are required on the operating Unit and Unit that is shutdown.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because this applies to the unit that is shutdown, and opening HVAC boundary doors are unrelated to the sequence of events leading to the initiation of an accident. Since the systems accident mitigation and normal functions will be maintained on the operating unit, the possibility of an accident or malfunction of a different type from those evaluated in the SAR is not created.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because there are no Technical Specifications for differential pressure requirements for the unit that is shutdown. Opening the HVAC boundary doors on the Unit that is shutdown will not affect the margin of safety on the Unit that is operating either.

MODIFICATION TEST

E20-2-97-248

DESCRIPTION

The purpose of this Modification Test was to verify the proper installation of a new sightglass for the 2B Auxiliary Feedwater (AF) Pump fuel oil day tank. This test is the same test performed on Unit 1 with minor revisions for lessons learned. The test was performed during the ASME run of the 2B AF Pump and sightglass level was compared to a temporary tygon tube sightglass. The test also verified the level indicator for the sightglass is properly aligned.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because this test is performed in Modes 4, 5 or 6 when the 2B AF Pump and its fuel oil day tank are not required to be operable. Performing this test during these modes will ensure the 2B AF Pump and its associated fuel oil day tank level indication are operable prior to entering Mode 3. There is no requirement for the 2B AF Pump to mitigate the effects of an accident prior to entering Mode 3.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because the 2B AF Pump and its fuel oil tank are not required to be operable in Modes 4, 5 or 6. This test will be completed prior to Unit 2 transitioning from Mode 4 to Mode 3 where the 2B AF Pump and its fuel oil day tank are required to be operable. There is no possibility of an accident or malfunction of a different type while performing this test in Modes 4, 5 or 6.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because this test is being performed in Modes 4, 5 or 6 where the 2B AF Pump and its fuel oil day tank are not required to be operable. All Technical Specification requirements were met.

DOCUMENT CHANGE REQUEST

990104

DESCRIPTION

The purpose of this Document Change Request was to revise drawing 20E-0-3391N to reflect the exemption of poured sealant per EQER-20-97-008 for limit switches serving FW009A-D and the addition of a note to clarify limitations attributable to flex conduit length for all EPNs associated with Note B.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because qualification of the proposed configuration without the poured sealant per EQER-20-97-008, as addressed on drawing 20E-0-3391N and in EQ binder EQ-GEN023 has been demonstrated.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because the proposed configuration is qualified and will not create the possibility of a different type of accident or malfunction from being created. All possible accidents postulated in the SAR in which the limit switches perform a safety function have been considered with respect to the qualification basis.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because this activity does not affect any parameters upon which the Technical Specifications are based.

NUCLEAR WORK REQUEST (NWR)

990018642

DESCRIPTION

The purpose of this Nuclear Work Request was to provide temporary lighting into the Unit 1 containment chiller room in support of the Bus 244 outage. To support the routing of temporary lighting into the room, Door D-305 had to be propped open. This door is considered to be part of the ventilation boundary.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because the accident mitigation function and normal functions of the Auxiliary Building Ventilation (VA) System will still continue to maintain the building at a negative pressure, control post accident radioactivity leaking from the ECCS equipment within required limits, and maintain environmental qualification zone requirements for the affected areas.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because the Auxiliary Building ventilation System and Door D-305 are unrelated to the sequence of events leading to the initiation of an accident. Since the systems accident mitigation and normal functions will be maintained, the possibility of an accident or malfunction of a different type from those evaluated in the SAR is not created.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because this activity does not affect any parameters upon which the Technical Specifications are based.

COMMITMENT CHANGE

DESCRIPTION

The purpose of this evaluation was to eliminate the requirement initiated by a previous Safety Evaluation to treat requirements previously in Current Technical Specifications that were transferred to procedures as specific SAR commitments. This evaluation documents the acceptability of 50.59 Screenings for future changes to the procedures in question. These items will no longer be required to be annotated in procedures as specific SAR commitments. Any change to these details in the procedure will be adequately documented by the procedure change process. This process provides for 50.59 evaluation through the screening process.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because the information in this change was previously screened and excluded from the Technical Specifications as part of the conversion from Current Technical Specifications to Improved Technical Specifications. Justification to support this conclusion along with why there is no increase in the probability an occurrence of any accident or transient was completed as part of the Improved Technical Specification project and remains applicable to this change.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because the information in this change was previously determined to not meet the screening criteria for inclusion in the Technical Specifications as part of the conversion from Current Technical Specifications to Improved Technical Specifications. As such, the information does not impact any accident, transient, or failure mode as described in the UFSAR. This change is administrative in nature.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because the NRC approved of relocating certain CTS specifications and details to the TRM in its SER of Braidwood TS Amendment 98, dated 12/22/98. Upon implementation of the ITS, these details are no longer applicable as TS requirements. Consequently, the changes do not affect any parameters upon which the Technical Specifications are based.

MODIFICATION TEST

E20-0-96-301-007
E20-0-95-252
E20-0-96-246-3

DESCRIPTION

The purpose of these Modification Tests was to verify proper operation of the Auxiliary Building Ventilation (VA) System fans after installation of forged blades, inner-fairing cover plate, and modified screen fasteners which were installed with the modification process.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because the accident mitigation function and normal functions of the VA System will still continue to maintain the building at a negative pressure, control post accident radioactivity leaking from the ECCS equipment within required limits, and maintain environmental qualification zone requirements for the affected areas.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because this activity does not affect the safety functions of the Auxiliary Building Ventilation System when modification testing the main VA supply fan. This activity is unrelated to the sequence of events leading to the initiation of an accident. Since the system's accident mitigation and normal functions will be maintained, the possibility of an accident or malfunction of a different type from those evaluated in the SAR is not created.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because this activity does not affect any parameters upon which the Technical Specifications are based.

MODIFICATION TEST

E20-2-96-250

DESCRIPTION

The purpose of this Modification Test was to test the replacement of the valve trim on 2CV110A done under Exempt Change E20-2-96-250. This valve controls flow from the Boric Acid Transfer Pumps to the Boric Acid Blender in the Reactor Makeup Control System (RMCS). The valve trim and the valve control scheme were modified to allow smoother operation of the valve to eliminate nuisance flow deviation alarms and closure of the valve on flow deviation conditions.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because the design function of this system has not changed. This system is not an accident initiator. RMCS will respond as designed for a dilution accident.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because the change was made to allow smoother operation of the installed system. The system still functions as designed. No additional equipment was added to the plant. Adjusting the stroke and control scheme for 1CV110A can not create an accident or malfunction of a different type. This change makes RMCS operation more reliable.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because this activity does not affect any parameters upon which the Technical Specifications are based.

CORE RELOAD DESIGN

Unit 2, Cycle 8

DESCRIPTION

The purpose of this Core Reload Design was to verify the Unit 2 Cycle 8 reload core was designed to perform under current nominal design parameters, Technical Specifications, and related bases such that core operating characteristics will be equivalent or less limiting than those previously reviewed and accepted; or for those postulated accidents analyzed and reported in the UFSAR which could potentially be affected by fuel reload, re-analyses or re-evaluations have been performed to demonstrate that the results of the postulated events are within allowable limits.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because the core reload design, including consideration of the effects of the proposed changes, will continue to meet key safety parameter limits. All design and performance criteria will continue to be met and no new failure modes or limiting single failure mechanisms have been created nor will the core operate in excess of pertinent design basis operating limits for the key safety parameters. The demonstrated adherence to these standards and criteria precludes new risks to components and systems that could introduce a new type of accident.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because the core reload design, including consideration of the effects of the proposed changes, will continue to meet key safety parameter limits. All design and performance criteria will continue to be met and no new failure modes or limiting single failure mechanisms have been created nor will the core operate in excess of pertinent design basis operating limits for the key safety parameters. The demonstrated adherence to these standards and criteria precludes new risks to components and systems that could introduce a new type of accident.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because each of the Technical Specifications and Technical Requirements Manual Limiting Conditions for Operation were reviewed to determine the impact of the core reload design on the acceptance limits/margin of safety. Operation of Unit 2 Cycle 8, with the introduction of new fuel has been analyzed in accordance with NRC approved methodologies. The reload core has been designed to operated within safety analysis acceptance limits and will therefore maintain safety margins.

CORE RELOAD DESIGN

Unit 2, Cycle 8

DESCRIPTION

The purpose of this Core Reload Design was to operate the Unit 2 Cycle 8 Core and establish a minimum boron concentration for Mode 6 and Cycle specific changes to the Core Operating Limits Report (COLR).

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because the core reload design, including consideration of the effects of the proposed changes, will continue to meet key safety parameter limits. All design and performance criteria will continue to be met and no new failure modes or limiting single failure mechanisms have been created nor will the core operate in excess of pertinent design basis operating limits for the key safety parameters. The demonstrated adherence to these standards and criteria precludes new risks to components and systems that could introduce a new type of accident.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because the core reload design, including consideration of the effects of the proposed changes, will continue to meet key safety parameter limits. All design and performance criteria will continue to be met and no new failure modes or limiting single failure mechanisms have been created nor will the core operate in excess of pertinent design basis operating limits for the key safety parameters. The demonstrated adherence to these standards and criteria precludes new risks to components and systems that could introduce a new type of accident.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because each of the Technical Specifications and Technical Requirements Manual Limiting Conditions for Operation were reviewed to determine the impact of the core reload design on the acceptance limits/margin of safety. Operation of Unit 2 Cycle 8, with the introduction of new fuel has been analyzed in accordance with NRC approved methodologies. The reload core has been designed to operated within safety analysis acceptance limits and will therefore maintain safety margins.

SPECIAL PROCESS PROCEDURE

SPP 99-025

DESCRIPTION

The purpose of this Special Process Procedure was to perform the In-service Testing (IST) full stroke open exercise test for the 2B Auxiliary Feedwater (AF) Pump discharge check valve 2AF003B. As allowed by Generic Letter 89-04, a check valve's full-stroke to the open position may be verified by passing the maximum required accident flow through the valve which will be accomplished using this procedure. Per Nuclear Fuel Services Department's Nuclear Design Information Transmittal (NDIT) 980014-00 the maximum required flow is 1097 gpm. Since the 1097 gpm does not include instrument uncertainty, instrument uncertainty will be applied using the methodology applied in Modification Test E20-2-97-312-1. This results in a minimum flow of 1130 gpm.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because in modes 5, 6 or defueled, when the test will be performed, there is no consequences to an of the accidents requiring the AF system except the "Loss of Nonemergency AC Power to the Plant Auxiliaries", "Steam Generator Tube Rupture (SGTR)" and "Loss of Coolant Accidents Resulting from a Spectrum of Postulated Piping Breaks within the Reactor Coolant Pressure Boundary (LOCA)." For these 3 accidents, the AF System would not be used for mitigation. The LOCA and SGTR would be addressed using the ECCS systems. The loss of Nonemergency AC Power would be dealt with using features of the Auxiliary Power System. Therefore, having the AF System in an abnormal configuration for testing purposed wold not increase the consequences of these accidents should they occur.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because this activity will flow water to the Steam Generators from the AF System during shutdown or refueling conditions. The secondary side of the steam generators will be protected as follows: 1) Steam Generator pressure and temperature limitations will be followed as described in TRM 3.7.a, 2) Chemistry will be notified prior to adding water to the Steam Generators to ensure any secondary side water chemistry issues or concerns are addressed, and 3) the test will be stopped if any Steam Generator wide range level reaches 95% to prevent putting water into the main steam lines. The reactivity change to the primary side of the plant associated with adding cold water to the secondary side of the steam generators will not pose a challenge to the shutdown margin.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because this activity does not affect any parameters upon which the Technical Specifications are based.

PROCEDURE REVISION

NMCP-3

DESCRIPTION

The purpose of this Procedure Revision to NMCP-3 "Controlling Movement of Special Nuclear Material within a Station" was to allow emergency setdown placement of fuel assemblies in designated safe shutdown locations and changes the signature requirements for certain activities contained in the procedure.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because the allowance of an emergency setdown location or replacing the assembly in its original location or changing signature requirements will not adversely affect any on the fuel system design, nuclear design, nor thermal and hydraulic design assumptions or criteria. No physical or design features of the fuel assemblies is impacted. The structural integrity of the fuel cladding or any other fission product barrier is not impacted by this change. The change does not affect any system actuation or accident mitigation capabilities or assumptions.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because the changes will not impact any fuel design or performance criteria. No new failure modes or limiting single failure mechanisms have been created. The restrictions places on acceptable locations (either by replacing in previous location or meeting prescribed acceptance criteria) precludes new risks to components or systems that could introduce a new type of accident.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because by placing the assembly at its previous reactor or spent fuel pool location, all reactivity management and criticality considerations addressed in the Technical Specifications, which had previously been analyzed and approved, would remain satisfied assuming other core or spent fuel pool parameters are unchanged. Similarly, any placement into a designated emergency setdown location will be analyzed and approved during initial Nuclear Component Transfer List preparation ensuring criticality requirements are satisfied.

CORE RELOAD DESIGN

Unit 2, Cycle 8

DESCRIPTION

The purpose of this Core Reload Design was to address a top nozzle issue and the minimum required boron concentration in Mode 5 and the cycle specific changes in the Core Operating Limits Report (COLR).

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because the core reload design, including consideration of the effects of the proposed changes, will continue to meet key safety parameter limits. All design and performance criteria will continue to be met and no new failure modes or limiting single failure mechanisms have been created nor will the core operate in excess of pertinent design basis operating limits for the key safety parameters. The demonstrated adherence to these standards and criteria precludes new risks to components and systems that could introduce a new type of accident.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because the core reload design, including consideration of the effects of the proposed changes, will continue to meet key safety parameter limits. All design and performance criteria will continue to be met and no new failure modes or limiting single failure mechanisms have been created nor will the core operate in excess of pertinent design basis operating limits for the key safety parameters. The demonstrated adherence to these standards and criteria precludes new risks to components and systems that could introduce a new type of accident.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because each of the Technical Specifications and Technical Requirements Manual Limiting Conditions for Operation were reviewed to determine the impact of the core reload design on the acceptance limits/margin of safety. Operation of Unit 2 Cycle 8, with the introduction of new fuel has been analyzed in accordance with NRC approved methodologies. The reload core has been designed to operated within safety analysis acceptance limits and will therefore maintain safety margins.

FIRE PROTECTION REPORT (FPR) REVISION

FDRP 19-006

DESCRIPTION

The purpose of this Fire Protection Report (FPR) Revision was to correct inaccurate information concerning the Fire Protection (FP) System jockey pumps and their electric drive motors. The FP jockey pumps are described in Appendix A5.4 of the FPR. This section stated the FP System is normally kept pressurized by one of the two motor-driven jockey pumps. The jockey pumps are only used for system pressurization. If a system demand occurs, the pressure will decrease in the system, automatically starting the motor driven fire pump. Page A5.4-27 was revised to remove information concerning "manufacturer", "enclosure", and "frame" for the jockey pump electric motor. Page A5.4-28 was revised to remove information concerning "manufacturer" and "type" and the specified number of stages was changed from 4 to 21 stages.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because the proposed activity did not remove or alter any Fire Protection System that affects its design capability. Therefore the change did not increase the probability of a design basis fire. The change was editorial to correct inaccurate information and did not alter fire mitigation or safe shutdown capability or effectiveness. Because safe shutdown capability was maintained, the consequences of a fire as previously analyzed is not increased.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because the this activity corrected inaccurate information describing the FP jockey pumps. The design performance of the jockey pumps and the function of the jockey pumps was not changed. The FP System was not affected in any way by the change, therefore, the possibility of an accident or transient of a different type was not created.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because this activity does not affect any parameters upon which the Technical Specifications are based.

PROCEDURE REVISION

BwCP PD-1

DESCRIPTION

The purpose of this Procedure Revision was to change the Lithium Control Program for Unit 2 from the "Modified Program" to the "Coordinated Program". Both Units will be on a "Coordinated Lithium Control Program" with a target pH of 7.1 throughout the cycle except at the beginning and end of the cycle.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because the Westinghouse assessment found no increased risk to system materials from the proposed coordinated pH control program. This program would add to the margin in preventing the Axial Offset Anomaly (AOA) as stated in an October 8, 1998 letter. The proposed program would maintain a coolant pH at 7.1 throughout the cycle eliminating the period of low $pH_{(t)}$ permitted by the present modified program. The "coordinated" $pH_{(t)}$ program targeted of 7.1 is expected to add a margin in preventing AOA, thus providing a more conservative approach and will maintain a coolable geometry following a large break Loss of Coolant Accident (LOCA). Changing the Reactor Coolant System (RCS) chemistry program as proposed will not affect the consequences of a large break LOCA, and will ensure the requirements of 10 CFR 50.46 and 10 CFR 100 are met.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because the change in pH control will not create adverse conditions in any of the primary systems listed (RCS, Chemical and Volume Control System (CVCS), Fuel and Vessel Internals). Lithium exists during normal operation and has previously been evaluated for impact on systems. Lithium has been previously evaluated for additions during start-up and similar effects on systems are expected. The intent of pH control is to increase the margin for preventing serious corrosion product releases during shutdowns and to minimize the potential of axial offset and flux anomalies.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because this activity does not affect any parameters upon which the Technical Specifications are based.

DESIGN CHANGE

D20-0-98-201-002

DESCRIPTION

The purpose of this Design Change was to provide the details and directions for the removal of one 10,000-gallon diesel fuel and two 10,000-gallon gasoline underground storage tanks. These tanks no longer meet the environmental and regulatory requirements and must be removed. All applicable dispensing pumps and underground fuel lines, as well as all related in-place electrical power supply lines, were disconnected, abandoned in-place, or removed as permitted by applicable code requirements.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because the design change deleted the underground storage tanks outside the owner protected area and did not affect any equipment important to safety. The removal of these tanks and the associated dispensing pumps and fuel lines will eliminate the potential adverse impact of the accident or a malfunction on the plant SSCs. Therefore, the probability of occurrence or the consequences of an accident or a malfunction of equipment important to safety previously evaluated in the UFSAR is not increased.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because the removal of these underground fuel storage tanks eliminates the potential for an accident or a malfunction since the fuel supply system is to be rendered out of service and is to be removed. Therefore, the possibility of an accident or malfunction of a different type than previously evaluated is not increased.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because this activity does not affect any parameters upon which the Technical Specifications are based.

MODIFICATION TEST

D20-2-99-303-1

DESCRIPTION

The purpose of this Modification Test was to start both Safety Injection (SI) Pumps (with recirculation flow paths) at the same time. The effect should be that both pumps run with recirculation flow and none of the relief valves lift. This would be similar to the situation when both pumps receive a Safety Injection (SI) signal with Reactor Coolant System (RCS) pressure greater than pump shut off head.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because there are no design basis accidents anticipated in Mode 4 and 5 with pressurizer level >5%. The Safety Injection Pumps are designed to operate simultaneously. Per the Technical Requirements Manual, with the plant in Modes 5 and pressurizer level <5%, one safety injection pump and flow path are required to be available; therefore the test will not be performed until pressurizer level is >5%.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because simultaneous operation of the Safety Injection Pumps is part of the system design. A minimum flow bypass line is provided on each Safety Injection Pump discharge to recirculate flow to the Refueling Water Storage Tank in the event that the pumps are started with the normal flow paths blocked. This line also permits testing during normal plant operation. Performances of this test will produce system operation very similar to that expected following a SI signal where RCS pressure remains above the shutoff head of the Safety Injection Pumps. The dual method used to prevent injection into the RCS during low temperature conditions is discussed in both the UFSAR and Technical Specification Bases. Connection of the strip chart recorder will be done in parallel with existing plant indications using good instrument work practices.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because the Pressure and Temperature Limits Report (PTLR) contains the acceptance limits that define the Low Temperature Over-Pressure requirements. The PTLR contains operating limits that pertain to overpressure protection setpoints and enable temperatures for the pressurizer Power Operated Relief Valves. The requirement to have no Safety Injection Pump capable of injecting into the RCS is not affected by performance of this modification test.

SPECIAL PROCESS PROCEDURE

SPP 99-026

DESCRIPTION

The purpose of this Special Process Procedure was to pressurize portions of the Safety Injection (SI) System to their required pressure for ASME Section XI visual exams to allow the required VT-2 exams to take place. The sections to be pressurized include the following: 1) the SI cold leg injection headers between the 2SI8818A/B/C/D, 2SI8819A/B/C/D, 2SI8956A/B/C/D and 2SI8948A/B/C/D check valves (one loop at a time) to ~1800-2230 psig, 2) the cold leg injection header upstream of 2SI8819A/B/C/D check valves to SI Pump discharge pressure, 3) the SI hot leg injection header between the 2SI8905A/B/C/D, 2SI8841A/B and 2SI8949A/B/C/D check valves (one loop at a time), to ~1800-2230 psig, and 4) the 2A/2D hot leg injection line upstream of 2SI8905A/D check valves to SI Pump discharge pressure. The 1800-2230 psig pressure source will be a hydro test pump connected at 2SI011.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because pressurizing portions of the Safety Injection System to approximately 1800-2230 psig (below their design pressure) will not have any affect on the probability of any of the accidents. The hydro test rig will have a relief valve to prevent overpressurization of any of the lines, so there will be no effect on the Reactor Coolant System (RCS) pressure boundary valves. With RCS pressure being maintained greater than hydro pump pressure, no water will be added to the RCS. Any water that is added to allow the pressurization will be 2300-2500 ppm boron, which is consistent with Refueling Water Storage Tank boron concentration. Performance of this procedure will have no affect on the Safety Injection System's ability to perform its intended function. Any accident that requires the Safety Injection Pumps to inject water into the RCS will, by definition, have reduced RCS pressure below that in the pressurized sections of pipe. The ECCS will remain capable of performing its design function throughtout performance of this test.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because the proposed activity will involve inspecting piping that could normally and is designed to be at RCS normal operating pressure. The 2SI1011 valve will have a 3/8" reducer and the hydro pump attached downstream of it. The reducer will limit any leakage out of this path to that within the capacity of a Centrifugal Charging Pump in the event of reactor coolant pressure boundary isolation valve leakage during the test.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because this activity does not affect any parameters upon which the Technical Specifications are based.

CORE RELOAD DESIGN

Unit 2 Cycle 8

DESCRIPTION

The purpose of this Core Reload Design was to operate and make appropriate changes to the Core Operating Limits Report (COLR).

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because the reload design, considering all features described, does not involve an increase in the consequences of an accident previously evaluated in the safety analysis report. The Unit 2 Cycle 8 reload design has been verified to satisfy accident analysis limits and assumptions presented in the Byron/Braidwood UFSAR. The core design does not have a direct role in mitigating the radiological consequences of any accident.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because the Unit 2 Cycle 8 reload design, including consideration of the effects of the changes, will continue to meet key safety parameter limits. All design and performance criteria will continue to be met and no new failure modes or limiting single failure mechanisms have been created nor will the core operate in excess of pertinent design basis operating limits for the key safety parameters. The demonstrated adherence to these standards and criteria precludes new risks to components and systems that could introduce a new type of accident.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because each of the referenced Technical Specifications and Technical Requirements Manual Limiting Conditions for Operation were reviewed to determine the impact of the Unit 2 Cycle 8 reload core on the acceptance limits/margin of safety. Operation of Unit 2 Cycle 8, with the introduction of Region 10 fuel has been analyzed in accordance with NRC approved methodologies. The reload core has been designed to operate within safety analysis acceptance limits and will therefore maintain safety margins.

PROCEDURE REVISION

BwVSR SI-1

DESCRIPTION

The purpose of this Procedure Revision was to utilize various methods to seat ECCS injection line check valves in support of surveillance BwVSR 3.4.14.1, RCS Pressure Isolation Valve Check Valve Leakage Surveillance. Plant evolutions and surveillances performed during plant heatup may result in the piping upstream of the SI8948A/B/C/D check valves being pressurized such that the check valves will not completely seat.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because this surveillance procedure does not change or impact the initiating conditions or events that result in any accident. The integrity of the Reactor Coolant, Main Steam, or Main Feedwater pressure boundary is not degraded by the performance of this surveillance. The testing methodology used in this surveillance is consistent with existing procedures and work practices. Therefore, the Safety Injection System and interfacing components with in the ECCS System remain capable of providing their accident mitigation functions.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because the function of the ECCS System is maintained and no new operational or failure modes are created.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because this surveillance supports compliance with Technical Specification 3.4.14 while maintaining the integrity and function of the SI System flowpaths relied upon to perform injection and long term cooling functions for the ECCS System. This surveillance reduces the availability of ECCS accumulators (one of four isolated at a time) within Technical Specification limitation. However, the remaining available accumulators provide the designed margin of safety for the system/components.

UFSAR REVISON

UFSAR Draft Revision Package DRP 8-030

DESCRIPTION

The purpose of this UFSAR Revision was to address the as-built plant condition with locked-open manual valves in the flow paths of the following ASME Section III relief valves: 1/2CV8120, 1/2SI8853A/B, 1/2SI8851, 1/2SI8856A/B, 1/2SI8842, 1/2RH8708A/B, 1/2SI8858, 1/2CV8124, and 1/2CV8393A/B. This addresses a deviation from ASME Boiler and Pressure Vessel Code Section III.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because the as-built plant configurations have all the subject manual block valves in locked open position during power operation, and maintained in that position by strict controls. The manual block valves allow one train of the ECCS, the Volume Control Tank (VCT) or the Regenerative Heat Exchanger to be isolated for maintenance without having to shutdown the whole ECCS, VCT or Regenerative Heat Exchanger System. These manual valves will be closed only during maintenance activities, when the protected equipment is not in service or án alternate relief path exists. It is extremely unlikely that the subject block valves(s) may be inadvertently closed and an overpressure event on the affected components(s) happen concurrently. Since the ECCS, VCT and Regenerative Heat Exchanger function is not being affected, the manual block valves do not increase the probability of concurrence or the consequence of an accident or malfunction of equipment important to safety.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because due to strict administrative controls to ensure the manual block valves are locked in the open position, the overpressure protection function and relief capacity of the ECCS relief valves, the VCT relief valves and the Regenerative Heat Exchanger thermal relief check valves are not diminished. Since the function of the ECCS, VCT and Regenerative Heat Exchanger are being maintained, there is no possibility of an accident or malfunction of a different type than previously evaluated.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because this activity does not affect any parameter upon which the Technical Specifications are based.

TEMPORARY MODIFICATION

99-0-002

DESCRIPTION

The purpose of this Temporary Modification was to remove and repair Door SD-172 and erect a temporary barrier at this location during the work activities. The temporary barrier will maintain the integrity of the Main Control Room envelope while the existing double door is removed and repaired.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because the Control Room Ventilation System (Control Room Envelope) is unrelated to the sequence of events leading to the initiation of an accident. The installation of the temporary barrier has been reviewed for the potential impact on Control Room evacuation routes. An alternate Appendix R lighted route is available for Main Control Room personnel to access the south stairwell in the Auxiliary Building.

   Since the system's accident mitigation and normal functions will be maintained with the temporary barrier installed, the possibility of an accident or malfunction of a different type from those evaluated in the UFSAR is not created.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because the installation of the Temporary Modification will not introduce any new failure mechanisms or modes which could impact the Main Control Room Envelope or any nearby or interfacing systems.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because this activity does not affect any parameters upon which the Technical Specifications are based.

ENGINEERING REQUEST

9901080

DESCRIPTION

The purpose of this Engineering Request was to evaluate the installation of a freeze seal upstream of the 1SI8804B valve on line 1SI34A-8" in accordance with approved Station procedures. ECCS System venting activities and subsequent ultrasonic inspections identified a small amount of air entrained in line 1SI34A-8". It has been determined that it was necessary to install a vent valve in the line to remove the air. This freeze seal provided component isolation on the upstream side of the intended location for the vent valve and maintained the Residual Heat Removal (RH) System pressure boundary integrity.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because the integrity of the ECCS pressure boundary is not degraded by the installation of this freeze seal. The installation of freeze seals to provide component isolation for maintenance is a common, proven industry practice. The procedures utilize industry recognized methodologies to ensure system integrity is maintained throughout the maintenance activity. The freeze seal will not result in ECCS System leakage or the potential for a Loss of Coolant Accident (LOCA) outside containment that could affect off-site dose analyses. The Safety Injection System and interfacing components within the ECCS System remain capable of providing their accident mitigation functions and the installation of the freeze seal upstream of the 1SI8804B valve does not increase the consequences (off-site dose) of any accident or transient.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because the installation of the freeze seal and the short duration of the vent valve installation does not adversely impact ECCS System pressure boundary integrity. In the event of a freeze seal failure only minor leakage is expected from the pipe penetration for the installation of the vent tap. The concurrent failure of the freeze seal with an ECCS System actuation is unlikely to occur prior to completing the socket welds on the vent tap. Since the ECCS System remains capable of performing its intended design function during the period in which the freeze seal is installed and no new failure modes are created, there is no possibility to create an accident or transient of a type from those evaluated in the UFSAR.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because all Technical Specification requirements were met.

MODIFICATION

D20-1-99-326

DESCRIPTION

The purpose of this Modification was to add a vent line (3/4") to line 1SI34A-8". The vent line was added at a local high point in order to facilitate venting of the line. This allowed the venting of any gas voids that could build up in the pipe.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because the addition of the vent line does not affect system operations under normal or accident conditions. Failure of this line is bounded by current analyses. The addition of the line allows venting of the piping to ensure it is water solid.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because addition of the vent line allows the piping to be vented to ensure it is water solid. Failure of this line is bounded by current analyses. This line is only used during the recirculation phase of a Loss of Coolant Accident. During normal operation, the valve in the vent line will be closed and the line will be capped.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because the addition of this vent line allows the piping to be vented to ensure it is water solid. This ensures the Safety Injection System is capable of performing its design function.

SPECIAL OPERATING CONDITION

Loose Part in Steam Generator

DESCRIPTION

The purpose of this Special Operating Condition was to address the identification of a foreign object in the secondary side of Steam Generator 2RC01BD. The object was originally identified and addressed during inspections performed during Refuel Outage A2R06. The secondary side of the Steam Generator was inspected again during Refuel Outage A2R07. The location, size configuration, and position of the object is the same as that evaluated under Safety Evaluation BRW-SE-1997-1523. Eddy current testing was performed on the affected tubes during A2R07 and previous outages. No tube wear was identified as a result of this foreign object being in contact with the tubes. Therefore, the condition remains bound by the previously performed Safety Evaluation.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because based upon the consistent verification (through eddy current testing) that no tube wear has occurred as a result of the existence of the foreign object and the consistency of the characteristics of the foreign object (size, position, location, configuration), the probability of occurrence or the consequences of an accident or a malfunction of equipment important to safety previously evaluated in the safety analysis report is not increased. The tubes will be examined via the eddy current non-destructive examination method during future outages.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because the worst consequence that could occur is primary to secondary leakage that could be initiated by tube wear. This tube wear could be caused by the foreign object being in contact with them. In the unlikely event the tube wear and subsequent primary to secondary leakage were to occur, the condition would be bound by the existing analysis for the release of primary coolant and radioactive material into the secondary system.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because the margin of safety as defined in the basis for the applicable Tech. Specs. is not reduces. The existing limitations for primary to secondary leakage remain in tact and are not increased. In the unlikely event the foreign object were to create tube wear that results in primary to secondary side leakage and the existing leakage limits as specified in the Technical Specifications are reached, the required actions, in accordance with the Technical Specifications will be implemented.

PROCEDURE REVISION

BwRP 5820-5

DESCRIPTION

The purpose of this Procedure Revision was is to lower the alert setpoint from 50% of the high alarm to 3x background on the Unit 1 and Unit 2 Steam Generator Blowdown Radiation Monitors to provide an earlier indication of an increased trend in radioactivity. An upward trend of Steam Generator blowdown radioactivity can aid in confirming the presence of a Steam Generator tube leak or rupture.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because the setpoint changes are digital in nature and the radiation monitor operation is not affected. The setpoint change has no affect on plant equipment or operations.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because the setpoint changes are digital in nature and the radiation monitor operation is not affected. The setpoint change has no affect on plant equipment or operations.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because this activity does not affect any parameters upon which the Technical Specifications are based.

DESIGN CHANGES

D20-1-99-327
D20-1-99-328

DESCRIPTION

The purpose of these Designs Changes was to add vent lines and valves on lines 1S134A-8" and 1SI05AB-8". Line 1SIK9A-1" and 1" valve 1SI161 will be installed on line 1SI34A-8" and line 1SIK10A-1" and 1" valve 1SI162 will be installed on line 1SI05AB-8". The vent lines and valves will be installed using a "hot tap" technique that permits installation in an operable, pressurized line. The vent lines and valves will facilitate the venting of the affected 8" ECCS lines to expel voids and pockets of entrained gases and maintain the lines water-filled consistent with the requirements of Improved Technical Specification 3.5.2, 3.5.3, and Surveillance Requirement 3.5.2.3.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because the installation of the vent valves under the proposed design changes will not change or impact the initiating conditions or events that result in the accidents analyzed in the UFSAR. The Safety Injection and Residual Heat Removal Systems and interfacing components within the ECCS System remain capable of providing their accident mitigation functions and the installation of the vent lines and valves under the proposed design changes do not increase the consequences (off-site dose) of any accident or transient.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because the ECCS System remains capable of performing its intended design function with the vent lines and valves installed and during the period in which they are being physically installed. No abnormal operational modes of the affected systems are required to support the installation of the vent lines and valves. The completed assemblies are fully qualified passive components that will not affect the function of the affected headers they are installed on.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because all Technical Specification requirements were met.

DESIGN CHANGE

D20-0-99-305-003

DESCRIPTION

The purpose of this Design Change was to install two new shooting ports in the Technical Support Center HVAC Room. Three non-ballistic guard booths were installed. They are located in the Turbine Building, Service Building and the Unit 1 Safety Valve Penthouse. Eight bronze plastic windowpanes in the Turbine Building will be replaced with clear plastic glazing. These changes are part of the operational safeguard response effectiveness (OSRE) revised defensive strategy. The shooting ports and windowpane replacements area will serve as defensive positions against the design basis threat, as defined in 10CFR73.1. The non-ballistic booths will serve as continuously occupied posts for a dedicated OSRE guard force.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because the locations of the non-ballistic booths and shooting ports have been coordinated with the Operations and Maintenance Departments to assure that there would be no impact on plant operations. The non-ballistic booths are powered from Turbine Building lighting panel circuits. All circuits are protected by circuit breakers. Structural floor loads have been qualified by calculation 18.3.11.9-BRW-99-0194. Impact on the Fire Protection Report has been evaluated approved per approved Station procedures. The Fire Protection Report has been revised to document the introduction of combustible materials into the area. However, these materials are constructed of low flame spread materials, and do not add to the combustible loading in the area. There are no other interactions with any SSCs. This change will not create any adverse interactions with plant SSCs.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because there are no interactions between the non-ballistic booths, shooting ports, Turbine Building windows and any equipment important to safety.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because this activity does not affect any parameters upon which the Technical Specifications are based.

PROCEDURE REVISION

SPP-010, 011, 012, 013
BwOR FRAM 206

DESCRIPTION

The purpose of these Procedure Revisions was to inject a chemical into the Circulating Water (CW) side of the Unit 2 Main Condenser (one waterbox at a time) in order to remove the scale that has formed on the internal surfaces of the Main Condenser tubes.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because the chemical cleaning activities do not increase the probability of occurrence or the consequences of a loss of condenser vacuum, steam generator tube rupture, LOCA or circulating water system piping failure in the Turbine Building. The calcium carbonate deposits inside the condenser tubes may be plugging pinhole leaks that may open-up during the chemical cleaning process. These leaks would affect secondary side chemistry; augmented monitoring is in place during the cleaning and appropriate action levels are taken per the existing Secondary Side Water Chemistry Program. The Main Control Room (MCR) habitability has been evaluated in the event of a chemical release onsite; the MCR remains habitable.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because the chemical cleaning process is expected to uncover some pinhole leaks. These will be no different than pinhole leaks discovered during normal operation. A report prepared by Dominion Engineering shows that the chemical cleaning process will not introduce, upon a condenser tube leak, chemistry species into the steam generators (SG) that are different than the chemistry species already present in the steam generators during normal plant operation. The main condenser cleaning process does not directly contact or impact the RCS pressure boundary. Since only one waterbox is cleaned at a time, no credible circulating water system failure is expected that is more significant than the design basis flood related to the failure of a CW pipe.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because the operation of any equipment addressed in the Technical Specifications is not affected.

PROCEDURE REVISION

BwVP RM80-3-1PR08
BwVP RM80-3-2PR08

DESCRIPTION

The purpose of these Procedures Revisions was to lower the alert setpoint from 50% of the high alarm to 3x background on the Unit 1 and Unit 2 Steam Generator Blowdown Monitors to provide an earlier indication of an increased trend in radioactivity. An upward trend of Steam Generator blowdown radioactivity can aid in confirming the presence of a Steam Generator tube leak or rupture.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because the setpoint changes are digital in nature and the radiation monitor operation is not affected. The setpoint change has no affect on plant equipment or operations.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because the setpoint changes are digital in nature and the radiation monitor operation is not affected. The setpoint change has no affect on plant equipment or operations.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because the activity does not affect any parameters upon which the Technical Specifications are based.

TEMPORARY MODIFICATION

TMOD 99-0-003

DESCRIPTION

The purpose of this Temporary Modification (TMOD) was to provide temporary cooling to the Chemistry Counting Room during modification activities to the Laboratory Ventilation (VL) System under Design Change D20-0-97-001.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because the design of this TMOD incorporates fire protection, contamination control, electrical loading, and seismic housekeeping considerations. No adverse impacts are created for any interfacing equipment important to safety. No uncontrolled release paths are created.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because no new failure mechanism or modes are created by the implementation of this TMOD. Design considerations preclude any impact on equipment within the laboratory complex or any interfacing equipment or systems within the Auxiliary Building.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because impairing D-356 effectively extends the VA System boundary/envelope to the doors from the corridor to the counting room and hot lab. During normal VL System operation the chemistry laboratory complex is pressurized and exhausts to the VA System. The ability to maintain less than or equal to ¼ inch negative pressure within the ECCS pump rooms during accident conditions is not impacted by this outside air source. With D-356 open, air will be drawn from the chemistry laboratory complex and the only air that infiltrates the system will be that which leaks by the hot lab and Turbine Building access doors. This air in-leakage is insignificant in comparison to the pressurized normal outside air source provided by the VL System. Therefore, the ability of the VA System to maintain negative pressure requirements within the Auxiliary Building is unaffected.

ENGINEERING REQUEST

9901066
9702337

DESCRIPTION

The purpose of these Engineering Requests was to install a second pair of freeze seals on the Essential Service Water (SX) supply and return lines to the 2A Safety Injection (SI) Pump Room Cubicle Cooler/Bearing Oil Cooler to help isolate the 2A SI Bearing Oil Cooler and associated SX isolation valves.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because the freeze seals have the same affect on the plant equipment as closing the SX isolation valves to the 2A SI Pump cubicle cooler and bearing oil cooler. The additional weight and flooding were evaluated and are not a concern, and there is no effect on overall required SX System flow. The SX System is also not a radiological barrier. The work will be performed when the Unit 2A SI Pump was out-of-service, the Unit 2 ECCS "A" train was inoperable, and the Unit 2 ECCS "B" train was operable.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because the freeze seal has the same affect on the plant equipment as closing the SX isolation valves to the 2A SI Pump cubicle cooler and bearing oil cooler. The additional weight and flooding were evaluated and are not a concern, and there is no effect on overall required SX System flow. The work will be performed when the Unit 2A SI pump was out-of-service, the Unit 2 ECCS "A" train was inoperable, and the Unit 2 ECCS "B" train was operable.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because this activity does not affect any parameters upon which the Technical Specifications are based.

DESIGN CHANGES

D20-2-99-326
D20-2-99-327
D20-2-99-328

DESCRIPTION

The purpose of this Design Change was to add vent lines and valves on lines 2SI34A-8" and 2SI05AB-8". The vent lines and valves will be installed using a "hot tap" technique that permits installation in an operable, pressurized line. The vent lines and valves will facilitate the venting of the affected 8" ECCS lines to expel voids and pockets of entrained gases and maintain the lines water-filled consistent with the requirements of Improved Technical Specification 3.5.2, 3.5.3, and Surveillance Requirements 3.5.2.3.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because the installation of the vent valves under the proposed design changes will not change or impact the initiating conditions or events that result in the accidents analyzed in the UFSAR. The Safety Injection and Residual Heat Removal Systems and interfacing components within the ECCS System remain capable of providing their accident mitigation functions and the installation of the vent lines and valves under the proposed design changes do not increase the consequences (off-site dose) of any accident or transient.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because the ECCS System remains capable of performing its intended design function with the vent lines and valves installed and during the period in which they are being physically installed. No abnormal operational modes of the affected systems are required to support the installation of the vent lines and valves. The completed assemblies are fully qualified passive components that will not affect the function of the affected headers they are installed on.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because all Technical Specification requirements were met.

NUCLEAR WORK REQUEST (NWR)

990055033-01

DESCRIPTION

The purpose of this Nuclear Work Request was to install an electrical jumper across the 2C priming tank high level switch to maintain the associated vent valve (2OG007C) open. Valves 1/2OG007A thru D are normally open, air to open vent valves that auto close on high water level in the associated priming tank (total of 4, one per condenser water box). This evaluation addresses the use of an electrical jumper that bypasses the normally closed contact of the level that ensures the vent valve will remain open. .

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because the installation of the electrical jumper will not impact the function of the condenser vacuum control system since the vacuum priming pump will not be isolated. The analysis of the Loss of Condenser Vacuum causing a Turbine Trip accident is not impacted. No credit is given for vent valve 2OG007C closing to mitigate this accident. The analyzed flood in the Turbine Building is due to a circulating water line beak that cannot be isolated. The resulting flood height in the Turbine Building would be a 5-feet below grade. The use of the electrical jumper does not impact the circulating water piping so as to effect this accident.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because with the jumper in place, vent valve 2OG007C will not be able to automatically close on a high water level signal in the 2C priming tank. However, actual plant conditions cannot result in water level from a condenser water box to reach the suction of the priming pump. The CW pump discharge pressure would be sufficient to lift the water above the priming pump suction when a water box outlet valve is closed, however, plant operating procedures do not allow this condition.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because this activity does not affect any parameter upon which the Technical Specifications are based.

DESIGN CHANGE

D20-2-99-326
D20-2-99-327
D20-2-99-328

DESCRIPTION

The purpose of these Design Changes was to add vent lines and valves on lines 2SI34A-8" AND 2SI05AB-8". The vent lines and valves were installed using a "hot tap" technique that permits installation in an operable, pressurized line. The vent lines and valves facilitated the venting of the affected 8" ECCS lines to expel voids and pockets of entrained gases and maintain the lines water-filler consistent with the requirements of Improved Technical Specification 3.5.2, 3.5.3, and Surveillance Requirement 3.5.2.3.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because the installation of the vent valves under the proposed design changes will not change or impact the initiating conditions or events that result in the accidents analyzed in the UFSAR. The Safety Injection and Residual Heat Removal Systems and interfacing components within the ECCS System remain capable of providing their accident mitigation functions and the installation of the vent lines and valves under the proposed design changes do not increase the consequences (off-site dose) of any accident or transient.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because the ECCS System remains capable of performing its intended design function with the vent lines and valves installed during the period in which they are being physically installed. No abnormal operational modes of the affected systems are required to support the installation of the vent lines and vales. The completed assemblies are fully qualified passive components that will not affect the function of the affected headers they are installed on.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because the installation of the vent lines and valves on lines 2SI34A-8" and 2SI05AB-8" maintain the pressure boundary integrity of the ECCS System in accordance with ASME Code design criteria while not creating any new operating limitations or failure mechanisms for the system. The ECCS System remains capable of fulfilling its design functions as described in the Technical Specification bases and 10CFR50.46.

   During the short period in which the hot tap machine is installed, the affected lines will be qualified for all design basis load combinations with the exception of seismic criteria. Design considerations, work practices, and design of the hot tap machine offset any potential for a reduction in the margin of safety.

MAINTENANCE ALTERATION

2OG007A,B or D

DESCRIPTION

The purpose of these Maintenance Alterations was to install a pneumatic jumper around the solenoid on the air supply to the operator for valves 2OG007A,B,D (one valve at a time). These are the water level control valves for the priming tanks on the vent line from the Main Condenser outlet waterboxes. The pneumatic bypass maintains the 2OG007s valves open to maintain an exhaust path for carbon dioxide (CO_2) during chemical cleaning of the 2A, 2B, or 2D Main Condenser waterbox, by providing a continuous air supply to the operator for the valves.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because the activities related to the installation of the pneumatic jumper for the solenoids for valves 2OG007A,B,D will be performed with the affected waterbox out-of-service. The open 2OG007 valves will maintain the function of the CO_2 exhaust system during Main Condenser chemical cleaning. The analyzed flood in the Turbine Building is due to a circulating water line break that cannot be isolated. The resulting flood height in the Turbine Building would be to 5 feet below grade. The implementation of the maintenance alteration does not have any impact on the Circulating Water piping.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because the function of the level control system on the priming tanks is to avoid flooding and the suction of the priming pump. With the pneumatic jumper in place, the level control valves will not be able to automatically close on a high water level signal in the corresponding priming tank. However, actual plant conditions cannot result in water level from a condenser waterbox to reach the suction of the priming pump. The off-gas piping downstream of the priming tanks will be isolated.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because this activity does not affect any parameters upon which the Technical Specifications are based.

TECHNICAL REQUIREMENTS MANUAL

Revision 3

DESCRIPTION

The purpose of this Technical Requirements Manual (TRM) Revision was to add Appendix S, "TRM Control Program," to the TRM. The new program provides guidance for identifying, processing, and implementing changes to the TRM in accordance with 10 CFR 50.59. The program includes the following provisions: 1) maintaining the TRM consistent with the Byron/Braidwood UFSAR, 2) maintaining consistency between the Byron and Braidwood TRMs, and 3) processing temporary changes to the TRM provided the temporary change does not involve an unreviewed safety question.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because this change does not involve a physical alteration of the facility or a change in the methods governing normal plant operation. The change does not alter assumptions made in the safety analysis and licensing basis. This new program provides an administrative process for controlling changes to the TRM.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because this change does not involve a physical alteration of the facility or a change in the methods governing normal plant operation. The change does not alter assumptions made in the safety analysis and licensing basis. This new program provides an administrative process for controlling changes to the TRM.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because this activity does not affect any parameters upon which the Technical Specifications are based.

DOCUMENT CHANGE REQUEST

990135

DESCRIPTION

The purpose of this Document Change Request was to revise drawings A-701 and A-337. These were drawing changes for Unit 2, removing drains from the 426 elevation and piping below from the drawings that were not installed during construction, and to show the as-built condition of the containment trench drain grates on the 377 elevation. Drain grates were changed from 5" to 4" in size.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because any potential flooding issue is bounded by the Loss of Coolant Accident (LOCA) and containment spray analyses. Elimination of the drains on 426 and the proper description of trench drain grates on 377 do not affect equipment important to safety. Early detection of a LOCA is not affected by these changes.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created by the elimination of floor drains on 426 or the trench drain grates being changed from 5" to 4". Any affect the floor drain system could have on equipment failures is bounded by the LOCA and containment spray analyses.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because the containment floor drain system does not have a margin of safety associated with it. The floor drain system will continue to provide the early detection of RCS unidentified leakage. There is no impact on the ability of the system to convey water to the containment floor drain flow meter to detect 1 gpm flow changes.

DESIGN CHANGES

D20-1-96-282-012
D20-2-96-282-013

DESCRIPTION

The purpose of these Design Changes was to replace the AR3 relays with DC contactors in the breaker closing control circuitry of Component Cooling Water (CC) System Pumps 1CC01PA/B and 2CC01PA/B.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because failure of the affected CC Pumps to start is not an accident initiator for any of the accidents evaluated in UFSAR Sections 15.0-15.8. Failure of a CC Pump is addressed in Table 9.2-5. Failure of the affected 4160V ESF bus due to existing AR3 relay failure is not an existing postulated accident initiator. Nor is the failure of the ESF bus due to a new DC contactor failure considered a credible postulated accident initiator. The intent of these changes is to reduce the likelihood of the failure of a CC System pump electrical feed breakers to close on a valid signal. Therefore, installation of the DC contactors in place of the existing AR3 relays is intended to decrease the probability of a malfunction of equipment important to safety.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because these changes do not: 1) alter any SSCs as described in the UFSAR, 2) result in a revision to the UFSAR, 3) impact any UFSAR wording, numbers, drawings, tables, or figures, 4) alter the function of the Auxiliary Power or CC System or components during any plant operating modes, 5) alter any initial conditions or assumptions used in UFSAR accident analyses, or 6) create any new failure modes. Therefore, the proposed changes will not create the possibility of an accident or transient different than those previously evaluated in the UFSAR.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because this activity does not affect any parameters upon which the Technical Specifications are based.

NUCLEAR WORK REQUEST (NWR)

990028235

DESCRIPTION

The purpose of this Nuclear Work Request was to repair the 2CS01PA Pump in the 2A Containment Spray (CS) Pump room. To access the pump, the floor plug to the 2A CS Pump room had to be removed. The floor plug is part of the ventilation boundary.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because the Auxiliary Building will be required to maintain at least -0.3 inches of water during repairs. This will satisfy the requirement for the ECCS pump rooms to maintain a minimum of -0.25 inches of water with respect to outside atmosphere.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because this work does not have an impact on the events which initiate a Loss of Coolant Accident or a radioactive release accident.

3. The margin of safety, as defined in the basis of the Technical Specification, is not reduced because all Technical Specification and differential pressure requirements were met.

PROCEDURE REVISION

RP-AP-900
BwRP 5820-5

DESCRIPTION

The purpose of these Procedure Revisions was to implement corporate procedure to change Unit 1 and Unit 2 Steam Jet Air Ejector (SJAE) setpoints based on the Reactor Coolant System noble gas concentrations, offgas flowrates, and required leak detection criteria.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because the procedure governs the setpoint change philosophy and does not affect the plant equipment operation. Setpoint changes are digital in nature and the monitor will operate exactly as before the setpoint change.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because the procedure governs the setpoint change philosophy and does not affect the plant equipment operation. Setpoint changes are digital in nature and the monitor will operate exactly as before the setpoint change.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because the monitor will alarm with a primary to secondary leakrate of 150 gpd. The procedure limits comply with existing Technical Specification requirements. This activity does not affect any parameters upon which the Technical Specifications are based.

TECHNICAL REQUIREMENTS MANUAL

Revision 3

DESCRIPTION

The purpose of this Technical Requirements Manual (TRM) Revision was to revise TRM Appendix N, "Technical Specification (TS) Bases Control Program," including transferring ownership to Regulatory Services and incorporating process improvements to facilitate implementation.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because the proposed changes do not involve a physical alteration of the facility or a change in the methods governing normal plant operation. The changes do not alter assumptions made in the safety analysis and licensing basis. This program provides an administrative process for controlling changes to the TS Bases. The revised program maintains consistency with the requirements of TS Section 5.5.14 and the 10 CFR 50.59 Safety Evaluation process.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because the proposed changes do not involve a physical alteration of the facility or a change in the methods governing normal plant operation. The changes do not alter assumptions made in the safety analysis and licensing basis. This program provides an administrative process for controlling changes to the TS Bases. The revised program maintains consistency with the requirements of TS Section 5.5.14 and the 10 CFR 50.59 Safety Evaluation process.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because this activity does not affect any parameters upon which the Technical Specifications are based.

.TEMPORARY MODIFICATION

99-2-017

DESCRIPTION

The purpose of this Temporary Modification (TMOD) was to install setpoint jumpers and adjust the bias on 2PC-0455B, the 7300 controller card for Pressurizer spray valve 2RY455B. The electrical jumpers installed by the TMOD restored function of the setpoint potentiometer on the Main Control Board Manual/Auto (M/A) Station for valve 2RY455B.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because the operation of the Pressurizer sprays is not credited for the mitigation of any transients. Operation of the Pressurizer sprays in the manual mode does not affect the operation or failure modes of any systems, structures or components relied upon for the mitigation of analyzed transients. Installation of the TMOD does not affect the ability of the Pressurizer spray valves to reposition to their fail safe condition when required.

2. The possibility of an accident or malfunction of a different type than previously evaluated in. the UFSAR is not created because operation of the pressurizer sprays in the manual mode does not affect the operation or failure modes of any systems, structures or components relied upon for the mitigation of analyzed transients. The spray valves will continue to fail to the closed position as required. Therefore, this TMOD does not create the possibility of a different type of accident or malfunction of equipment important to safety than previously evaluated.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because this T-Mod does not alter any of the listed margins. Operation of the Pressurizer will remain within the assumed normal operating parameters at all times. Installation of the TMOD does not affect the margin of safety of any Technical Specifications.

NUCLEAR WORK REQUEST (NWR)

990056906

DESCRIPTION

The purpose of this Nuclear Work Request was to install a full current bypass around the Unit 1 "A" Phase Main Generator Disconnect.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because the jumper will be installed between the Main Transformer and the Switchyard and will not affect the operability or availability of offsite sources to supply the Class 1E busses. Therefore safety related equipment will not be affected and the probability of malfunctions of safety related equipment will not increase.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because power to the ESP busses during normal and abnormal conditions are supplied by the Unit System Auxiliary Transformer (SAT), opposite Unit SAT or the Emergency Diesel Generator. Installation of a jumper around the Main Generator disconnect does not affect the operation of these components therefore a malfunction of a different type than any previously in the safety analysis is not created.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because this activity does not affect any parameters upon which the Technical Specifications are based.

DESIGN CHANGE

D20-1-99-312
D20-2-99-312

DESCRIPTION

The purpose of these Design Changes was to make the installation of ultrasonic feedwater flow instrumentation upstream of the flow venturis in the Unit 1 and Unit 2 Steam Tunnels permanent. The devices were installed under Temporary Modifications 99-1-010 and 98-2-015. These Design Changes involve no actual physical change since the ultrasonic feedwater flowmeters are already installed. The configuration changes implemented under this activity involve drawing changes, vendor manual updates, calculations, and Electrical Work Control System panel information updates.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because these activities do not impact the initiating conditions or consequences of any accident. Therefore, there is no affect on the probability of occurrence or consequences of any accident.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because there is no change in the normal operation of any equipment created by the permanent configuration changes incorporated under this activity. No new failure modes are created by these changes that could create a different accident or malfunction than currently evaluated in the UFSAR.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because this activity does not affect any parameters upon which the Technical Specifications are based.

SPECIAL PROCESS PROCEDURE

SPP 99-028

DESCRIPTION

The purpose of this Special Process Procedure was to remove the 0C Non-Essential Service Water (WS) strainer from service and obtain field data on the strainer inlet valve by varying the position of the disc into the seat. The data assisted in evaluating if the position of the valve disc into the seat could negatively impact valve opening.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because the WS System is not required to mitigate any UFSAR related accidents. The WS System does not alter the initial conditions of any accidents. Loss of WS will not prevent the safe shutdown of the plant since no safety related loads are served by this system. As a result, there is no increase in the probability of the accidents or transients described in the UFSAR. This activity will not impede any equipment important to safety from performing their intended function during a UFSAR accident. The WS System is not safety related and it does not interface or interact with equipment important to safety in a manner that would increase their probability of malfunction. Therefore, there is no increase in probability of occurrence of malfunction equipment important to safety.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because the WS System does not interact or interface with any equipment important to safety. The design margin of equipment important to safety will not be degraded. Therefore, this activity does not create the possibility of a different type of malfunction or equipment important to safety previously evaluated.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because this activity does not affect any parameters upon which the Technical Specifications are based.

DESIGN CHANGE

9900049
9900050

DESCRIPTION

The purpose of these Design Changes was to permanently install the Advanced Measurement and Analysis Group (AMAG) ultrasonic flow measurement system to improve feedwater flow input readings to the plant process computer calorimeter algorithm by eliminating errors due to the influence of fouling, instrument uncertainties, and piping configuration. This was accomplished by modifying a calorimetric software constant to normalize feedwater flow based on AMAG readings, which results in a more accurate reactor power reading in percent Reactor Thermal Power (RTP) at the plant process computer

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because the improvement of feedwater flow readings are a result of removing errors associated with the design of the feedwater differential pressure instrument loop which is prone to the influence of fouling, instrument uncertainties, and piping configuration. This modification does not justify the increase in feedwater flow beyond already analyzed design conditions. The resulting change in percent RTP reading at the plant process computer will allow operations to manually increase or decrease power accordingly within the licensing basis. Operator aid CWPI-NSP-OP-1-5 directs operations to reset the feedwater flow constant following a plant excursion that has the potential to result in feedwater venturi defouling, to ensure that reactor power does not erroneously increase beyond the licensing basis. Therefore, the initial assumptions intrinsic to the plant transient and accident analysis are maintained.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because changes to the calorimetric software have been properly verified and validated. Operator aids and procedures have been developed to prevent overpowering the reactor should a feedwater venturi defouling excursion occur. The correction to the feedwater flow input to the calorimetric software does not represent a change outside of the thermal design parameters as previously evaluated in the safety analysis report, and does not have the potential to create an accident or malfunction of a different type.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because loop uncertainty calculations for the use of the ultrasonic feedwater flow measurement system have been performed and demonstrate that when feedwater flow correction is used, the calorimetric uncertainty is bounded by the 102% rated thermal power which forms the basis for plant transient and accident analysis.

PROCEDURE REVISION

CC-AA-401

DESCRIPTION

The purpose of this Procedure Revision was to provide a method for the installation and control of temporary lead shielding on structures, systems or components to achieve a reduction in personnel radiation exposure. In addition, guidelines were provided for the use of water shields, frisker booths, and shielding structures.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because this activity implements a controlled mechanism for the installation and removal of lead shielding using an evaluation process which maintains the design basis and functionality of the affected system, structure, or component (SSC). The installation of the temporary shielding does not create an accident initiating condition, nor does it impact the ability of any SSC to mitigate the consequences of any accident.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because no new failure modes or conditions are created by the implementation of this activity. No interactions are created with interfacing equipment that could create or impact any new accident.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because this activity does not affect any parameters upon which Technical Specifications are based.

SETPOINT CHANGE

1RE-PR027
2RE-PR027

DESCRIPTION

The purpose of these Setpoint Changes was to revise the 1/2RE-PR027 setpoints based on Reactor Coolant System activity, offgas flowrates, and desired leakrates.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because the setpoint changes are digital in nature and the equipment will operate exactly as before the setpoint change.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because the setpoint changes are digital in nature and the equipment will operate exactly as before the setpoint change. No new equipment is added to the plant and the installed equipment will function as designed.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because the monitor will still alarm with a primary to secondary leakrate of 150 gpd. This activity does not affect any parameters upon which the Technical Specifications are based.

TEMPORARY MODIFICATION

99-2-018

DESCRIPTION

The purpose of this Temporary Modification (TMOD) was to disconnect the 480 Vac power feed to heater 12 of Pressurizer Backup Heater Group D for Unit 2. The power feed was disconnected by lifting the conductors of cables 2RY452 and 2RY453 at 480 Vac distribution cabinet 2 RY03ED. There are two other heaters (#11 and #35) that are powered from the same feed breaker as heater #12. These heaters will remain in service.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased. Although the heaters are not specifically used in accident analysis, they provide the capability to maintain subcooling in the long term during loss of offsite power. The non-Class 1E ESF buses servicing the Pressurizer heaters can be powered from the Unit Auxiliary Transformer, the System Auxiliary Transformer, or the emergency Diesel Generator by closing the ESF to non-ESF crosstie breaker. This change will not affect the ability of the onsite auxiliary power system to supply power to the loads required for mitigating the consequences of accidents. UFSAR Section 15.2.8 concludes that the Pressurizer heaters' contribution to overpressure transients is negligible. The Pressurizer Power Operated Relief Valves along with the reactor protection, Safety Injection, and Auxiliary Feedwater systems are assumed to function to mitigate the consequences of a feedwater line break. SSCs associated with these systems will not be adversely affected by this change.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because the operation of the Pressurizer heaters with the TMOD installed will continue to satisfy the requirements for normal Pressurizer pressure control. Interfaces with other SSCs during normal or transient conditions will not change in a manner that would result in the creation of any new accident or plant transient that has not been previously analyzed. The minimum heater capacity required is sufficient to maintain the Reactor Coolant System near normal operating pressure when accounting for heat losses through the Pressurizer insulation. The remaining heaters provide sufficient capacity to maintain normal pressure and temperature conditions in the primary system. The Pressurizer will still be able to perform its design functions during normal and accident conditions.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because the values that establish the margin of safety related to the minimum capacity of a heater group are between the Technical Specification minimum of 150 kW and the minimum heater capacity required by Westinghouse (<150 kW) to account for Pressurizer heat loss. Since Backup Group D will still have a rated capacity (393 kW) that is well above the Technical Specification minimum, the margin of safety is not reduced by this change.

PROCEDURE REVISION

0BwOA ENV-4

DESCRIPTION

The purpose of this Procedure Revision was to reflect a seismic monitoring instrumentation upgrade with new equipment by the original manufacturer.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because the Seismic Monitoring System does not interfere with any SSCs important to safety. The Seismic Monitoring System does not affect the operation or availability of equipment important to safety. The replacement of the existing seismic monitoring instrumentation will not increase the probability of an accident of plant transient.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because the Seismic Monitoring System does not affect the operation or availability of equipment important to safety, thus no increase in the possibility of a different type of accident or malfunction occuring that was not previously analyzed.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because this activity does not affect any parameters upon which the Technical Specifications are based.

OFFSITE DOSE CALCULATION MANUAL

Revision 2

DESCRIPTION

The purpose of this Offsite Dose Calculation Manual (ODCM) Revision was to revise the generic section of the ODCM. This revision reduced the text in Chapter 1-7 and Appendices A-C by editing the text for clarity, removing redundant information and site specific criteria, and combining Chapters, Appendices and Tables. Criteria for evaluation of dose to the public were added for activities involving dredging of rivers and storage of radioactive material onsite.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because the changes do not affect, alter, or modify any system, structure or component.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because the changes do not affect, alter, or modify and system, structure or component. No new equipment was added to the plant.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because this activity does not affect any parameters upon which the Technical Specifications are based.

TEMPORARY MODIFICATION

99-1-011

DESCRIPTION

The purpose of this Temporary Modification (TMOD) was to disconnect thermocouple heater circuits and bypass individual thermocouple inputs in the Unit 1 Train B Reactor Vessel Level Instrumentation System (RVLIS) panel, 1PA52J.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because RVLIS is an accident monitoring system and has no affect on normal plant operations. The Train B RVLIS probes will still provide level indication to the operators to determine the progression of an accident and effects of actions to control the accident.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because the change does not alter the overall operation of the RVLIS system and does not create any interactions with plant systems. The system is post accident monitoring only and is not used for normal plant operations.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because the margin of safety, as defined in the basis of the Technical Specification, is not reduced because the RVLIS probe is still considered operable. The minimum number of sensors required by the Technical Specifications to consider the Train B probes operable is still met after the implementation of this TMOD.

PORCEDURE REVISION

Emergency Operating Procedures
Abnormal Operating Procedures

DESCRIPTION

The purpose of these Procedure Revisions was to reflect the disconnection of thermocouple inputs in the Unit 1 Train B Reactor Vessel Level Instrumentation System (RVLIS) panel, 1PA52J. These changes were made under Temporary Modification 99-1-011.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because RVLIS is an accident monitoring system and has no affect on normal plant operations. The Train B RVLIS probes will still provide level indication to the operators to determine the progression of an accident and effects of actions to control the accident.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because the change does not alter the overall operation of the RVLIS system and does not create any interactions with plant systems. The system is post accident monitoring only and is not used for normal plant operations.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because the RVLIS probe is still considered operable. The minimum number of sensors required by the Technical Specifications to consider the Train B probes operable is still met after the implementation of this TMOD.

PROCEDURE REVISION

NSP-CC-AA-204

DESCRIPTION

The purpose of this Procedure Revision was to implement a new procedure for the control of the Vendor Equipment Manual.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because the procedures addressed by this activity are not used for operation of the plant or specific equipment. Vendor information is used for maintenance and operation of plant equipment, but the change to the procedures used to implement the vendor information control process does not change the way that vendor information will be controlled or reviewed at the Station. Vendor information used will still have the same level of control as currently exists to ensure equipment is maintained and operated properly. Therefore, equipment reliability is maintained and probability of accidents resulting from failure of equipment is not affected.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because there are no changes to any plant SSCs resulting from the issuing of the new procedure. The implementation of the new procedure will maintain the program for review and control of vendor information. Therefore, equipment will be operated and maintained consistent with vendor requirements with no new failure modes or effects resulting from improper control of vendor data.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because this activity does not affect any parameters upon which the Technical Specifications are based.

ENGINEERING REQUEST

ER9901281

DESCRIPTION

The purpose of this Engineering Request was to install a freeze seal on the Essential Service Water (SX) supply line to the 1B SX Pump Room cubicle cooler and the 1B SX Pump Lube Oil cooler to repair SX return valve 1SX2158B.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because the freeze seal has the same affect on plant equipment as closing the SX supply isolation valve to 1B SX Pump Room cubicle cooler and 1B SX Pump Lube Oil cooler. The additional weight and flooding were evaluated and are not a concern, and there would be negligible effect on overall SX System slow in the event of a failed freeze seal. The SX System is also not a radiological barrier. The work will be performed when the Unit 1B SX Pump is Out-Of-Service.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because the possible accidents or malfunctions from a freeze seal installation are piping/support overstresses and failed freeze seal (flooding, SX flow). The additional weight and flooding were evaluated and are not a concern, and there would be negligible effect on overall SX System flow in the event of a failed freeze seal.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because all Technical Specification requirements were met.

OUT OF SERVICE

980014877

DESCRIPTION

The purpose of this Out of Service was to remove power from Reactor Vessel Head Vent Valves 1RC014A and 1RC014C until refueling outage A1R08. Position indication of 1RC014A became inoperable. Per the Technical Requirements Manual (3.4.e), actions had to be taken to remove power from the valve actuators in the inoperable vent path.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because no credit was taken for the head vents during the analysis for potential for voiding in the Reactor Collant System during transients. These valves are not an accident initiator. Failure of these valves is bounded by the Loss of Coolant Accident analysis.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because no new equipment was added to the plant. A second vent path remains operable and this path would be operated as it was designed.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because this activity does not affect any parameters upon which the Technical Specifications are based.

UFSAR REVISION

UFSAR Draft Revision Package 7-268

DESCRIPTION

The purpose of this UFSAR Revision was to reflect the results of the new three analyses performed to support replacing the internal trim of the Auxiliary Feedwater (AF) control valves per design change E20-2-97-312. The three analyses performed are loss of normal feedwater (LONF), feedline break (FLB), and small break loss-of-coolant accident (SBLOCA).

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because the subject valves are not the initiators of any of the analyzed accidents nor interact with other systems or components. The consequences of any accident were not adversely affected, and the required margin of safety was not reduced because the AF flowrate required to mitigate any of the accidents was not affected as shown in the analyses.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because the three analyses have been performed to support the subject design change to ensure that the required maximum and minimum flows were not affected.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because this activity does not affect any parameters upon which the Technical Specifications are based.

UFSAR REVISION

UFSAR Draft Revision Package 8-057

DESCRIPTION

The purpose of this UFSAR Revision was to revise Table 5.2-1 to reflect the correct code year and addendum for the Loop Stop Isolation Valves (LSIVs). Table 5.2-1 does not currently include information regarding the LSIVs. Other Reactor Coolant System valves are included in the table.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because this change documents the code year for the LSIVs in the UFSAR. The valve design is not changed and the valve is adequate for the systems conditions. Therefore, there is no impact on the probability of any accident or equipment malfunction. The code year information can have no effect on the amount of radioactivity released to the environment. Therefore, there are no changes to accident circumstances.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because this is a non-functional change. There are no impacts on plant operations or on system interfaces. No new accidents or transients will be created. This change has no impact on valve or system function. The operating conditions of the RCS are not affected. No different malfunctions of equipment will result.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because this activity does not affect any parameters upon which the Technical Specifications are based.

PROCEDURE REIVISION

CC-AA-402

DESCRIPTION

The purpose of this Procedure Revision was to provide the requirements for the temporary rigging of loads to structural steel beams, auxiliary steel beams, piping, and pipe support auxiliary steel. This procedure also sets the requirements and provides the details for the use of rigging frames.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because this activity involves "temporary" rigging situations. Because of the temporary nature of the rigging load being applied to the structures, systems, or component (SSC's) as a "lift and set" operation, seismic concerns are not pertinent. The allowable load capacities provided within the procedure have been evaluated and determined to be acceptable per calculation 19.14.0-BRW-99-201, Rev. 0. Items being lifted or set into position are generally pieces of equipment or components of a system requiring maintenance or construction which are taken out of service per Station controlled procedures and are not considered part of the operating plant during the rigging activity. Since this procedure does not alter or challenge the function and operability of the affected SSCs, the probability of occurrence or the consequences of an accident or a malfunction of equipment important to safety is not increased.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because this activity provides various precautions, limitations, and prerequisites for the usage of the pre-engineered rigging allowable load tables for the various SSC's that may be used as rigging attachment points. Any rigging lift point meeting the requirements of this procedure has been evaluated (pre-engineered) as having adequate capacity for the imposed allowable rigging load. No functional changes or operating restrictions are placed on equipment required to support any accident or transient mitigation function and the SSC operability is not impacted if required to be operational during the rigging activity. There is no possibility of creating an accident or transient different from those evaluated in UFSAR as a result of temporary rigging performed in accordance with the procedure.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because this activity does not affect any parameters upon which the Technical Specifications are based.

DESIGN CHANGE

D20-1-98-341

DESCRIPTION

The purpose of this Design Change was to replace the current ¾" x 1" Crosby model JRAK relief valves (with a set pressure 1750 psig) for 1SI8851, 1SI8853A and 1SI8853B with ¾" x 1" Crosby OMNI 900 series relief valves (with a set pressure at 1810 psig). The design pressure for the portion of the Safety Injection (SI) System piping bounded by valves 1SI8802A, 1SI8802B, 1SI8835, 1SI8888, 1SI8922A, and 1SI8922B, including other bypass and vent lines, is being increased from 1750 psig to 1825 psig.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because the design change does not change the function or operation of the ECCS. The design change increases the design pressure of the system consistent with licensing commitments to ASME criteria. The integrity of the SI System pressure boundary and injection flowpaths are not degraded in any way as a result of the implementation of this design change. The function of the SI System is not being affected and over-pressure protection of SI piping is maintained.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because the function of the SI and ECCS Systems is maintained and no new failure modes are created. The over-pressure protection of SI piping is maintained and there are no direct or indirect impacts on interfacing systems and components.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because this activity does not affect any parameters upon which the Technical Specifications are based.

PROCEDURE REVISION

1/2BwVSR 5.5.6-1

DESCRIPTION

The purpose of the Procedure Revision was to implement these two new surveillance procedures. The procedures describe the tests and examinations that are performed to monitor degradation of the post tensioning tendon systems. The reason this activity is being addressed under a full safety evaluation is there is an outstanding UFSAR Change that is pertinent to this activity. These procedures are consistent with the UFSAR Change. The UFSAR Change was made to recognize the implementation of new regulatory rules that apply to this issue. ASME Section XI, 1992 Edition and Addenda and 10CFR50.55(a) are now the documents that provide the rules for inspection and testing of containment structures and post tensioning systems (tendons).

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because this activity does not alter nor add any accident conditions as stated in the UFSAR. The probability of an accident nor the consequences of an accident will not be increased. The purpose of these surveillance procedures is to direct the performance of testing and examinations. The purpose of the tests and examinations is to provide a method of early detection of degradation. The testing and examinations will therefore provide assurance the containment structures and post tensioning systems will perform as designed under accident conditions.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because these surveillance procedures are designed to monitor the containment structures and post tensioning systems for degradation. The surveillance procedures ensure early detection of degradation of the containment structures and post tensioning systems. The surveillance procedures provide a mechanism to ensure the possibility of an accident or malfunction of a type different from those evaluated in the SAR is identified and addressed.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because the implementation of these surveillance procedures does not reduce the safety of margin as stated in the Technical Specification Bases or UFSAR. The inspections and tests performed in accordance with these procedures provides early detection of symptoms of degradation that could have the potential to reduce the margin of safety that is established for the containment structures. These surveillance procedures are implemented on an established frequency (every 5 years) for the purpose of ensuring the containment structures continue to perform the design basis function during normal operating and accident conditions.

TEMPORARY MODIFICATION

99-1-014

DESCRIPTION

The purpose of this Temporary Modification (TMOD) was to disconnect thermocouple heater circuits and bypass individual thermocouple inputs in the Unit 1 Train B Reactor Vessel Level Instrumentation System (RVLIS) panel, 1PA52J. The subject TMOD installs a resistor network to bypass the heater for Sensor 7 to maintain overall circuit resistance for operation of the heater controller. In addition, the normal unheated junction input from Sensor 7 will be disconnected to eliminate the problems that the induced voltage is causing. This sensor is providing erratic indication due to an induced voltage on the unheated junction thermocouple circuit. The output of the heated junction circuit for Sensor 7 will be wired in parallel with the unheated junction circuit, so that the Train B RVLIS will still get a temperature input from Sensor 7.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because RVLIS is an accident monitoring system and has no affect on normal plant operations. The Train B RVLIS probe will still provide level indication to the operators to determine the progression of an accident and effects of actions to control the accident.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because the change does not alter the overall operation of the RVLIS system and does not create any interactions with plant systems. The system is post accident monitoring only and is not used for normal plant operations.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because this activity does not affect any parameters upon which the Technical Specifications are based.

TEMPORARY MODIFICATION

99-0-007

DESCRIPTION

The purpose of this Temporary Modification (TMOD) was to provide a temporary source of compressed air to the River Screen House (RSH) Service and Instrument Air Systems. The temporary air compressor was connected to the RSH air system at hose drop valve 0SA122A and will be powered from a non-ESF welding receptacle. The temporary air compressor was intended to maintain RSH Service and Instrument Air pressure in the event of a failure or unavailability of the existing RSH air compressors. The RSH compressed air systems support the operation of the Circulating Water Make-up System.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because the RSH compressed air system, and the temporary air compressor installed under this activity, performs no function that could initiate any accident or transient evaluated in the UFSAR. The failure of the TMOD will not prevent safety related components or systems from mitigating the consequences of any design basis accident or performing as intended under emergency conditions.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because the installation of this TMOD will not introduce any new failure mechanisms or modes that could impact equipment important to safety or any other interfacing systems.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because this activity does not affect any parameters upon which the Technical Specifications are based.

PROCEDURE REVISION

CC-AA-204

DESCRIPTION

The purpose of this Procedure Revision was to implement a new procedure for the control of the Vendor Equipment Manual. This revision corrected the revision number for the Quality Assurance Program Topical Report.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because the procedures addressed by this activity are not used for operation of the plant or specific equipment. Vendor information is used for maintenance and operation of plant equipment, but the change to the procedures used to implement the vendor information control process does not change the way that vendor information will be controlled or reviewed at the Station. Vendor information used will still have the same level of control as currently exists to ensure equipment is maintained and operated properly. Therefore, equipment reliability is maintained and probability of accidents resulting from failure of equipment is not affected.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because there are no changes to any plant SSCs resulting from the issuing of the new procedure. The implementation of the new procedure will maintain the program for review and control of vendor information. Therefore, equipment will be operated and maintained consistent with vendor requirements with no new failure modes or effects resulting from improper control of vendor data.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because this activity does not affect any parameters upon which the Technical Specifications are based.

SPEICAL PROCESS PROCEDURE

SPP 99-029

DESCRIPTION

The purpose of this Special Process Procedure (SPP) was to perform a leak test of a 36 inch diameter floor seal between the Boric Acid Storage Tank Room (elevation 401 feet) and the Unit 2 Diesel Driven Auxiliary Feedwater (AF) Pump Room (elevation 383 feet), both located in the Auxiliary Building. The leak test is accomplished by enclosing the floor seal with a berm and filling it to a maximum level of 1 foot with Demineralized Water (WM). The purpose of the test is to identify the exact location of a leak known to exist at or in the area immediately surrounding the floor seal so repairs can be initiated.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because this test will not make any equipment required to mitigate the consequences of these accidents unavailable or degraded. The Boric Acid (AB) and Auxiliary Feedwater (AF) Systems will function as designed and as described in the UFSAR. The test contains provisions that will ensure the Unit 2B AF Pump remains operable.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because there are adequate provisions to ensure the equipment in the AF System and AB System will remain operable during this test. Since the AF System is analyzed for a complete loss of one of the two trains the test will not create the possibility of a different type of malfunction of AF equipment than previously analyzed. The AB System will not be subject to failures not previously considered or analyzed.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because this activity does not affect any parameters upon which the Technical Specifications are based.

TECHNICAL REQUIREMENTS MANUL

Temporary Change 99-001

DESCRIPTION

The purpose of this Technical Requirements Manual (TRM) Temporary Change was to change the non-return check valve inspection frequency from 40 months to 44 months. Per TRM Surveillance Requirements 3.3.g.6, at least one of the twelve extraction steam non-return check valves is to have a visual and surface inspection (mag particle/dye penetrant) of valve seats, disks and stems every 40 months to verify no unacceptable flaws or corrosion. Due to the failure to perform the surface inspection during refueling outage A1R06 or A1R07 the 40 month inspection frequency of TSR 3.3.g.6 will be exceeded prior to the next refueling outage, A1R08.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because the extraction steam non-return check valves are not safety related. No credit is taken for these valves in any accident analysis. Failure of these valves does not affect the safe shutdown of the plant.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because there is no possibility of an accident or transient being created as these valves will continue to operate as originally designed.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because this activity does not affect any parameters upon which the Technical Specifications are based.

CORE OPERATING LIMITS REPORT REVISION

Unit 2, Cycle 8

DESCRIPTION

The purpose of this Core Operating Limits Report (COLR) Revision was to update the COLR with the proper operating values for the rest of Cycle 8 for Unit 2.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because the reload design, including the COLR considering all features described, does not involve an increase in the consequences of an accident previously evaluated in the safety analysis report. The Unit 2 Cycle 8 reload design has been verified to satisfy accident analysis limits and assumptions presented in the Byron/Braidwood UFSAR. The core design does not have a direct role in mitigating the radiological consequences of any accident.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because the Unit 2 Cycle 8 reload design, including the COLR, will continue to meet key safety parameter limits. All design and performance criteria will continue to be met and no new failure modes or limiting single failure mechanisms have been created nor will the core operate in excess of pertinent design basis operating limits for the key safety parameters. The demonstrated adherence to these standards and criteria precludes new risks to components and systems that could introduce a new type of accident.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because each of the referenced Technical Specifications and Technical Requirements Manual Limiting Conditions for Operation were reviewed to determine the impact of the Unit 2, Cycle 8 reload core on the acceptance limits/margin of safety. Operation of Unit 2 Cycle 8, with the introduction of Region 10 fuel has been analyzed in accordance with NRC approved methodologies. The reload core has been designed to operate within safety analysis acceptance limits and will therefore maintain safety margins.

ENGINEERING REQUEST

9900436

DESCRIPTION

The purpose of this Engineering Request was to install freeze seals on the Essential Service Water (SX) supply and return lines to the Spent Fuel Pit Pump 1 Cooler to repair valves 1SX2165A & 1SX2166A.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because the freeze seal has the same affect on the plant equipment as closing the SX isolation valves to the cooler. The additional weight and flooding were evaluated and are not a concern, and there is negligible effect on overall required SX System flow. The SX System is also not a radiological barrier. The work will be performed when Spent Fuel Pit Pump 1 is out-of-service. The freeze seals will not initiate or alter the initial conditions of any accident or transient. The Spent Fuel Pit Pump Coolers are not required to operate during any design basis accidents.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because the freeze seals have been evaluated for the additional weight, flooding, and SX System flow and found acceptable. There are no accidents or malfunctions of a different type (other than a failed freeze seal, which has been addressed) created by adding these temporary freeze seals.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because this activity does not affect any parameters upon which the Technical Specifications are based.

DESIGN CHANGE

D20-0-98-350

DESCRIPTION

The purpose of this Design Change was to install additional lamps for improving penetration area illumination in the Fuel Handling Building areas of Unit 1 and Unit 2. New lamps will be added to circuits from Regular Lighting Cabinet (RLC) 114. Also, design documents were updated to reflect that two existing lighting circuits are fed from "spare" circuits of Essential Lighting Cabinet 146. ELMS-AC was updated accordingly to include the additional load on MCC 132X5.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because the affected lighting cabinets have a circuit protection scheme which adequately protects the motor control center (MCC) from a fault in the lighting cabinet. Adding loads to the lighting panel does not degrade the overall protection scheme and does not increase the probability of a malfunction of the powering MCC.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because UFSAR section 8.3 analysis describes that power supply circuits fed from 480 volt motor control centers are designed with fault protection devices to disconnect circuit faults from power sources and to disconnect the faulted component with minimum disturbance to the unfaulted portions of the system. Thermal-magnetic circuit breakers in the motor control centers feed and protect resistive loads (i.e., heaters, lighting, 120-Vac distribution panels). The additional lighting loads due to the design change are within the ratings of the lighting panel circuit breakers. The added loads, lighting panels and circuits are bounded by the described analyzed protective scheme.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because this activity does not affect any parameters upon which the Technical Specifications are based.

NUCLEAR WORK REQUEST (NWR)

980081672-01

DESCRIPTION

The purpose of this Nuclear Work Request was to install a freeze seal on a Demineralized Water (WM) System hose drop line. This freeze seal isolated the hose drop isolation valves 1WM214A and 1WM214B to repair/replace these valves.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because this freeze seal was installed on a non-safety related system and did not interface with any safety related system or any equipment important to safety. The WM System is not an accident initiator and is not relied upon to mitigate the consequences of an accident.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because the freeze seal was installed in accordance with approved Station procedures and is an approved industry practice. This activity did not affect or interface with any equipment important to safety.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because this activity does not affect any parameters upon which the Technical Specifications are based.

DESIGN CHANGE TEST

M20-0-98-300-1

DESCRIPTION

The purpose of this Design Change Test was to test the upgrade to the seismic monitoring instrumentation. Existing seismic monitoring components replaced in panel 0PA02J included the annunciator, playback unit digital cassette accelerograph, response spectrum analyzer, and uninterruptible power supply (UPS). The free field seismic sensor and free field seismic trigger were also replaced. The new components installed in 0PA02J include the following: GNC-CR seismic data acquisition system, laptop computer, printer, replacement UPS, and annunciator module. This test verifies proper operation of this equipment. Two procedures (BwVS TRM 3.3.b and BwVS TRM 3.3.b.r) were revised to reflect the changes made.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because the seismic monitoring instrumentation does not interact with other plant systems in a manner that could cause an accident or plant transient. The replacement of the existing seismic monitoring instrumentation will not increase the probability of an accident or plant transient. The seismic monitoring instrumentation does not interface with any SSCs relied upon to keep the offsite dose within 10CFR100 limits, for accidents or plant transients that have potential radiological consequences. Any potential interactions between the replacement equipment and other SSCs have been considered in the design process. The replacement system has been tested to demonstrate its acceptability in terms of conducted or radiated emissions (potential effect on adjacent plant equipment), as well as its susceptibility to electromagnetic interference. The testing demonstrated that the replacement system will not affect equipment important to safety in the vicinity of 0PA02J. Considering the above, the probability of a malfunction of equipment important to safety will not increase.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because the function of the seismic monitoring instrumentation is to collect data to determine the magnitude of a seismic event. However, the seismic monitoring instrumentation does not affect operation of equipment important to safety. This design change is being performed in accordance with the original design and functional requirements for the existing seismic monitoring instrumentation, and will increase system reliability and availability.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because the seismic monitoring instrumentation is not part of any Technical Specification Limiting Condition for Operation. This equipment is not discussed in the Technical Specification Bases. Requirements related to this equipment are contained in the Technical Requirements Manual. The seismic monitoring instrumentation does not affect any SSCs where margin of safety is a consideration.

DESIGN CHANGE

D20-1-98-343
D20-2-98-343

DESCRIPTION

The purpose of these Design Changes was to upgrade the Reactor Coolant Pump (RCP) motor feed breaker protection logic by replacing the existing model CO-11 overcurrent relays with model CO-8 overcurrent relays. The CO-8 relays provide better coordination in the motor protection scheme to prevent inadvertent trips during RCP starting. The design changes also add a second set of COM-5 overcurrent relays to the breaker protection logic to enhance overcurrent protection for the containment penetrations used for the motor feeds. The control logic for the RCP motor breakers includes a second trip coil, which uses the opposite train of 125Vdc ESF distribution for control power. The second set of COM-5 overcurrent relays will be connected to actuate the redundant trip coil to provide additional protection, which will not be affected by a loss of normal control power to the bus. UFSAR Section 8.1.12 and supporting figure 8.1-1 sheet 1 were updated to reflect addition of the second set of COM-5 relays in the breaker protection scheme for penetration protection.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because a malfunction of any relay in the breaker protection scheme may cause an inadvertent trip of a RCP, which causes a partial loss of RCS flow. Since the COM-5 relays are identical to the existing relays, the probability of inadvertent actuation is the same as the existing relays. Since the malfunction of any COM-5 would result in a RCP trip, the probability of a malfunction in the second set of relays causing a partial loss of flow is the same as the existing circuit. Therefore, the probability of the malfunction of any COM-5 relay causing a partial loss of flow is unchanged. The CO-8 relay is part of the protection during motor start. During normal operation, other relays prevent a malfunction of the CO-8 relay from causing a breaker trip and malfunction of a CO-8 relay can only cause an inadvertent trip during RCP starting. Since partial loss of flow accident is during normal operation with the Reactor Critical and all RCPs already running, the probability of the accident is not changed by the CO-8 relays.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because the relays are Class 1E, seismically mounted and qualified to the same requirements as the existing ones. The spare COM-5 relays that are being connected were installed during the original purchase of the switchgear and were included in the initial qualification. Failure affects of these relays is no different than the relays in the existing protection scheme. In addition, there was no change to the existing backup protection device for the penetration.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because this activity does not affect any parameters upon which the Technical Specifications are based.

PLANT BARRIER IMPAIRMENT

DESCRIPTION

The purpose of this Plant Barrier Impairment was to allow Door D-448, between the Chemistry Laboratory Complex and Auxiliary Building, to remain open. This was required due to installation of Temporary Modification 99-0-003. This door is a ventilation system boundary.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because the probability of an accident is not affected since the Laboratory Ventilation (VL) and Auxiliary Building Ventilation (VA) Systems do not initiate or alter the conditions of any accident. The consequences of an accident/malfunction of important to safety equipment is not affected since this activity does not affect the capability of the VL System to shutdown on a high radiation signal or the filtering capability of the VA System.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because the VL System does not initiate or alter the initial conditions of any accident and its capability to shutdown on a high radiation signal will be maintained. No uncontrolled radioactive release paths are created by this activity since the filter efficiency of the VA System is at least as good as that provided by the VL System.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because this activity does not affect any parameters upon which the Technical Specifications are based.

UFSAR REVISION

UFSAR Draft Revision Package 8-033

DESCRIPTION

The purpose of this UFSAR Revision was to revise the Generating Station Emergency Plan (GSEP), Byron and Braidwood Annex to the Emergency Plan, and the UFSAR to implement a single centralized Emergency Operations Facility (EOF) at Downers Grove for all ComEd generating stations.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because the location of the offsite emergency response facility does not impact any equipment important to safety. The consequences of an accident or malfunction neither increases or decreases as a result of this facility move.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because the location of the offsite emergency response facility does not factor into any accident or malfunction. Moving the EOF to Downers Grove does not create any new accidents or malfunctions.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because this activity does not affect any parameters upon which the Technical Specifications are based.

PROCEDURE REVISION

CC-AA-201

DESCRIPTION

The purpose of this Procedure Revision was to replace the current Braidwood Plant Barrier Impairment Program procedure (BwAP 1110-3 series procedures) and Control of Watertight Doors and Flood Seal Openings/Barriers procedure (BwAP 380-3 series procedures) with a common NGG Plant Barrier Control Program procedure.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because these procedures describe the administrative controls necessary to ensure that regulatory requirements are met when impairing plant barriers. If compensatory actions are required to support impairing a plant barrier, criteria are provided to ensure that a 50.59 safety evaluation or screening is performed as necessary.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because these procedures provide a review of the impact of barrier degradation on systems and functions to ensure that the plant is maintained within the design basis as evaluated in the SAR. Therefore, accidents or malfunctions of a different type than evaluated in the SAR are not created. This change is administrative in nature, providing a common procedure for use. All required regulatory actions will continue to be performed.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because this activity does not affect any parameters upon which the Technical Specifications are based.

ENGINEERING REQUEST

9901341

DESCRIPTION

The purpose of this Engineering Request was to install a freeze seal on the Essential Service Water (SX) line to the OA Main Control Room Chiller to isolate valve 0SX063A. As a contingency, the SX discharge line may have had a freeze seal installed should valve 0SX064A not isolate.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because the use of freeze seals is a common and proven industry practice for temporary piping system isolation. The freeze seals have the same effect on plant equipment as closing the SX isolation valves to the Main Control Room Chiller during maintenance activities. The freeze sealing activity will be performed per approved Station procedure. Additionally, should a freeze plug fail to hold, valve 0SX063A will be back seated to prevent potential flooding. The affected piping stresses were reviewed for the additional freeze jacket weight and found acceptable.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because the freeze seals have been evaluated for the effects of the additional weight of the freeze jacket, flooding, and SX flow and found to be acceptable. Therefore, adding these temporary freeze seals creates no accidents of transients of a different type.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because this activity does not affect any parameters upon which the Technical Specifications are based.

SOFTWARE REVISION

19990154

DESCRIPTION

The purpose of this Software Revision was to implement changes to the Software created by a Design Change (D20-0-98-300) to the Seismic Monitoring Instrumentation System.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because the seismic monitoring instrumentation, and the "AllView" software that controls it, does not interact with other plant systems in a manner that could cause an accident or plant transient. The replacement of the existing seismic monitoring will not increase the probability of an accident or plant transient. The seismic monitoring instrumentation does not interface with any SSCs relied upon to keep the offsite dose within 10CFR100 limits, for accidents or plant transients that have potential radiological consequences. Any potential interactions between the replacement equipment and other SSCs have been considered in the design process.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because the function of the seismic monitoring instrumentation is to collect data to determine the magnitude of a seismic event. The "AllView" software facilitates the data collection process. However, the seismic monitoring instrumentation does not affect operation of equipment important to safety. This design change was performed in accordance with the original design and functional requirements for the existing monitoring instrumentation, and will increase system reliability and availability.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because this activity does not affect any parameters upon which the Technical Specifications are based.

NUCLEAR WORK REQUEST (NWR)

990080092

DESCRIPTION

The purpose of this Nuclear Work Request was to remove a floor plug to support maintenance activities involving the Blowdown Demineralizer Tank, 0WX01DA. Removal of the floor plug is considered part of a ventilation boundary.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because the accident mitigation function and normal functions of the Auxiliary Building Ventilation (VA) System will still continue to maintain the building at a negative pressure, control post accident radioactivity leaking from the ECCS equipment within required limits, and maintain Environmental Qualification Zone requirements for the affected areas.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created affecting the safety functions of the Auxiliary Building HVAC system when the floor plug is removed to access the 0WX01DA. This activity is unrelated to the sequence of events leading to the initiation of an accident. Since the system's accident mitigation and normal functions will be maintained, the possibility of an accident or malfunction of a different type from those evaluated in the SAR is not created.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because this activity does not affect any parameters upon which the Technical Specifications are based.

SETPOINT CHANGE

SSCR 99-026

DESCRIPTION

The purpose of this Setpoint Change (SSCR) was to adjust the Unit 2 Steam Generator (SG) high nozzle flow alarm setpoint to 3.638 x 10E6 lbm/hr (current setpoint is 3.48 x 10E6 lbm/hr) per the Westinghouse Uprate Project Feasibility Report. The SG high nozzle flow alarm provides annunciation only and does not serve a feedback or control function. The proposed change will eliminate the occasional nuisance alarms associated with the 2FW520 Feedwater Regulating Valve (that is currently exhibiting a broader band of flow control due to instrumentation hysteresis) and the lower than nominal indicated preheater bypass flow. The setpoint change also eliminated any potential high nozzle flow alarms resulting from the implementation of AMAG flow calibration multiplication factors. These multiplication factors are utilized to correct venturi flow and are subject to change with venturi fouling and/or other loop instrumentation inaccuracies.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because the safety systems and indicators required to mitigate a S/G Tube Rupture. Loss of Normal Feedwater, Feedwater System Pipe Break or Feedwater System Malfunctions causing an increase in Feedwater Flow event are unaffected by the proposed setpoint change. Total Feedwater flow is not impacted and SG nozzle flow is not used as an initial condition in any accident analysis. Although the SG tube wear rate is predicted to increase, eddy current inspections will ensure that the probability of a SG tube rupture is not increased. The existing flow accelerated corrosion (FAC) program effectively monitors the Feedwater system pipe wall wear rates to preclude a line break. The 2FW009 valves ability to perform their isolation function is unaffected by this change.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because overall plant operation is unaffected by this change. The potential change in Feedwater flow through the system does not introduce any new equipment malfunctions or failure modes. The affected equipment is merely subject to potentially increased FAC and flow induced tube excitation/vibrations.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because this activity does not affect any parameters upon which the Technical Specifications are based.

ENGINEERING REQUEST

9901437

DESCRIPTION

The purpose of this Engineering Request was to install a freeze seal on the Essential Service Water (SX) supply line to the oil cooler for the 1A Auxiliary Feedwater (AF) Pump to isolate valve 1SX2103A for repair.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because the use of freeze seals is a common and proven industry practice for temporary piping system isolation. The freeze seal have the same effect on plant equipment as closing the SX isolation valve to the oil cooler during maintenance activities. The freeze sealing activity will be performed per approved Station procedures. Additionally, should a freeze plug fail to hold, valve 1SX2103A will be covered with a blind flange or a steel blank plate to prevent potential flooding. The affected piping stresses were reviewed for the additional freeze jacket weight and found acceptable.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because the freeze seal have been evaluated for the effects of the additional weight of the freeze jacket, flooding, and SX flow and found to be acceptable. Therefore, adding this temporary freeze seal creates no accidents or transients of a different type.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because this activity does not affect any parameters upon which the Technical Specifications are based.

ENGINEERING REQUEST

9900534
9702379

DESCRIPTION

The purpose of these Engineering Requests was to install freeze seal on Essential Service Water (SX) return line from Unit 2B Chemical and Volume Control (CV) Pump room cubicle cooler, gear cooler, and lube oil cooler to replace valve 2SX124B.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because the freeze seal has the same effect on the plant equipment as closing the SX isolation valves to these coolers. The additional weight and flooding were evaluated and are not a concern, and there is no effect on overall required SX System flow. The SX System is also not a radiological barrier. The work will be performed when the Unit 2B CV Pump is out-of-service, the Unit 2 ECCS "B" train is inoperable, and the Unit 2 ECCS "A" train is operable. A temporary support will also be installed. A failure of the freeze seal will not initiate or alter the initial conditions to any accidents or transients.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because the freeze seal has the same effect on the plant equipment as closing the SX isolation valves to these coolers.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because this activity does not affect any parameters upon which the Technical Specifications are based.

TEMPORARY MODIFICATION

99-1-016

DESCRIPTION

The purpose of this Temporary Modification was to install a blank-off plate in place of the existing orifice plate to isolate the 1B Steam Generator Blowdown Condenser Hotwell Pump for maintenance.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because the Steam Generator Blowdown System is not an accident initiator and is not used to mitigate the consequences of an accident. This activity does not affect the high energy line break analysis. The system was still capable of performing its design function.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because no new equipment was added to the plant. The system was still capable of performing its design function. This activity did not affect the operation of the plant.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because this activity does not affect any parameters upon which the Technical Specifications are based.

DESIGN CHANGE

D20-1-99-307
D20-2-99-307

DESCRIPTION

The purpose of these Design Changes was to remove redundant sample cooler panel Component Cooling Water (CC) isolation valves 1/2CC9447A on the inlet piping of sample cooler panel 1/2PS29J. The piping portion downstream of valve 1/2CC9448A was re-classified to Class D since the piping class break is moved to valve 1/2CC9448A. In addition, the inlet piping of the 1/2CC9420 relief valve was re-classified to Class D while the discharge piping of the subject relief valve remains as Class C. This re-classification of the relief valve piping was necessary since the inlet portion is interfacing with the inlet sample cooler panel piping that has been re-classified to Class D.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because valve deletion and piping class re-classification does not compromise the pressure boundary of the Component Cooling Water System since the qualification criteria for Class C and Class D small bore piping are the same and the discharge side of the relief valve is an acceptable isolation point. There are no changes to the function of any SSCs. The function of the deleted valve is served by the redundant sample cooler panel isolation valve. Changes to the piping configuration are qualified for all the Design Basis loads. Therefore, the proposed change does not create the possibility of an accident or transient of a different type than previously evaluated.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because this change does not compromise the pressure boundary of the Component Cooling Water System. There are no changes to the function of any equipment important to safety. The function of the deleted valve is served by the redundant sample cooler panel isolation valve. Changes to the piping configuration are qualified for all the Design Basis loads. The sample cooler panel is classified as non-safety related. Therefore, the proposed change does not create the possibility of a different type of malfunction of equipment important to safety.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because this activity does not affect any parameters upon which the Technical Specifications are based.

DOCUMENT CHANGE REQUEST

990230
990248

DESCRIPTION

The purpose of these Document Change Request was to revise drawing M-2069 Sheet 2 of 4 to show PS-1028C as controlling valve 0GW5018A rather than valve 0GW5030C, PS-1035C as controlling valve 0GW5018B rather than valve 0GW5032C, PS-1030C as controlling valve 0GW5030C rather than valve 0GWPCV1030C, and PS-1032C as controlling valve 0GW5032C rather than valve 0GWPCV1032C.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because the Waste Gas Compressors are not important to safety or used to mitigate any accident or transient and they are not used to support any other plant equipment that is important to safety. This activity does not change compressor operation or setpoints as designed. Therefore the probability of a rupture of either the Waste Gas Decay Tanks or the Recycle Holdup Tanks is not affected.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because any Waste Gas Compressor accident or transient would be bounded by previously evaluated accidents. This is an administrative change to have the drawings reflect as-built conditions.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because this activity does not affect any parameters upon which the Technical Specifications are based.

PLANT BARRIER IMPAIRMENT

DESCRIPTION

The purpose of this Plant Barrier Impairment (PBI) was to open Door D-560 to the 2 B/C Main Steam Isolation Valve (MSIV) Room to provide increased air flow to reduce temperature in the room while personnel are working in the area.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because the U-2 Main Steam Tunnel and 2 B/C MSIV room Ventilation System is unrelated to the sequence of events leading to the initiation of an accident and it has no mitigating or safety function.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because the proposed activity breaches the ventilation envelope allowing some air to enter the room directly from the outdoors (instead of through Main Steam Tunnel). While slightly cooler temperatures are expected, no significant difference in temperature is expected and equipment in the area will be maintained at/near normally maintained temperatures. No credit is taken for this ventilation system during an accident or transient condition.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because this activity does not affect any parameters upon which the Technical Specifications are based.

PROCEUDRE REVISION

RP-AA-462

DESCRIPTION

The purpose of this Procedure Revision was to implement a standard procedure that prescribes the controls under which radiography operations are performed.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because no SSC's are directly affected. Radiography does create temporary access restrictions to some of the SSC's. If emergent access is required within the restricted areas, the procedure provides provisions to ensure radiography could immediately be terminated.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because no SSC's are directly affected. Radiography does create temporary access restrictions to some of the SSC's. If emergent access is required within the restricted areas, the procedure provides provisions to ensure radiography could immediately be terminated. No new equipment was added to the plant.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because this activity does not affect any parameters upon which the Technical Specifications are based.

NUCLEAR WORK REQUEST (NWR)

950079021

DESCRIPTION

The purpose of this Nuclear Work Request was to repair the 1SX091A valve. Door D-245 had to be propped open during this work to allow routing of hoses into the 1A Containment Spray (CS) Pump room. This door is an HVAC boundary door.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because the Auxiliary Building will be required to maintain at least –0.3 inches of water during repairs. This will satisfy the requirement for the ECCS Pump rooms to maintain a minimum of –0.25 inches of water with respect to outside atmosphere per UFSAR and Technical Specification requirements.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because this work does not have an impact on the events which initiate a Loss of Coolant Accident or a radioactive release accident.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because all Technical Specification and differential pressure requirements were met.

NUCLEAR WORK REQUEST (NWR)

970117214
990030389

DESCRIPTION

The purpose of these Nuclear Work Requests was to clean the cubicle cooler for the 2B Chemical and Volume Control (CV) Pump room. A freeze seal was required to be installed to provide isolation for the cubicle cooler. To support the cleaning and freeze seal work, doors D-282 and D-278 needed to be propped open to allow for routing of hoses. Both of these doors are part of the ventilation boundary.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because the Auxiliary Building will be required to maintain at least –0.3 inches of water during repairs. This will satisfy the requirement for the ECCS Pump rooms to maintain a minimum of –0.25 inches of water with respect to outside atmosphere per UFSAR and Technical Specification requirements.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because this work does not have an impact on the events which initiate a Loss of Coolant Accident or a radioactive release accident.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because all Technical Specification and differential pressure requirements were met.

UFSAR REVISION

UFSAR Draft Revision Package 8-048

DESCRIPTION

The purpose of this UFSAR Revision was to reflect installation of Design Change E-20-97-246. This Design Change installed a bypass line on 2SI8812A and B to prevent thermally induced pressure locking.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because installation of the bypass line has no effect on the function of the Emergency Core Cooling System. The only effect due to installation of the modification would be slight leakage past the closed SI8812 valve. This would have minimal effect and is bounded by complete failure of an SI8812 valve to close.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because complete failure of the SI8812 valve to close has been previously assumed and evaluated in the UFSAR. This single failure bounds any leakage that may occur through the bypass line during the recirculation phase of a LOCA. During shutdown cooling, leakage past a SI8812 valve would create the same conditions as leakage through the bypass line. The bypass line is designed to the same requirements as the header line.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because this activity does not affect any parameters upon which the Technical Specifications are based.

DESIGN CHANGE

D20-1-99-321
D20-2-99-321

DESCRIPTION

The purpose of these Design Changes was to revise the control logic for the Turbine Intercept Valves (IVs) to eliminate the wiring for the Close Intercept Valve (CIV) function associated with the Turbine Digital Electro-Hydraulic Computer (DEHC). The change was accomplished by lifting and abandoning the field cable conductors at 1(2)MS01JG and 1(2)PA22J. The CIV function reduces Turbine speed in response to partial generator load loss and is normally inhibited at the DEHC unless Transmission System instability is a concern. The CIV function is inhibited, so eliminating the associated wiring does not affect operation of the plant or Turbine controls or protection. The design changes also revised the Load Drop Anticipator (LDA) circuitry associated with the DEHC Overspeed Protection Controller (OPC) to eliminate the LDA signal from initiating closure of the Turbine Governor Valves (GVs) and Intercept Valves (IVs). The change was performed by internal wiring changes to the DEHC (1(2)PA22J). The LDA function anticipates a potential overspeed that could result from opening of the generator output breaker at load. However, the Generator protection logic initiates a Turbine trip on loss of load. Therefore, the LDA function to reduce steam flow by shutting the GVs and IVs is overridden by the Turbine trip initiated on loss of load. Therefore, eliminating LDA will have no affect on Turbine operation or protection. The UFSAR was revised to reflect these changes.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because the primary objective of the OPC is to prevent excessive Turbine overspeed such that a Turbine trip is avoided. Since the Turbine protection is provided with a Turbine trip on loss of load from the Generator protection scheme, the LDA is not required to limit Turbine overspeed following a loss of load. Further, the mechanical and electrical overspeed trips are not affected by the change. Therefore, the probability of a Turbine overspeed resulting in a Turbine Missile is not increased.

   The OPC was designed to respond to partial or complete load changes to reduce Turbine steam supply. The operation of the OPC is not associated with the causes of a loss of load. The OPC is also not associated with equipment operation that can result in other Turbine protection trips. Therefore, the probability of a loss of load or Turbine trip is not increased.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because the LDA and CIV functions are not used as part of the existing Turbine overspeed protection. Therefore, eliminating the associated wiring will have no affect on Turbine protection. The OPC is a protection feature in response to overspeed conditions and has no impact on Turbine controls. The changes will only affect the conditions for OPC output signal by eliminating the LDA input, but does not affect the OPC overspeed circuitry or Turbine speed sensors. The LDA and CIV functions are not part of any other Turbine control or protection features. The OPC does not provide input to or trips for any other plant equipment. Therefore, eliminating the LDA and CIV circuits will have no impact on Turbine operation or protection or operation of the plant.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because this activity does not affect any parameters upon which the Technical Specifications are based.

DOCUMENT CHANGE REQUEST

990050

DESCRIPTION

The purpose of this Document Change Request (DCR) was to implement the following changes: 1) Valve 0FP225, the Fire Pump Test Header Drain Valve, was reflected as normally open on P&ID M-52 Sheet 5. A note was added to this P&ID that indicates that this valve is normally open to provide freeze protection for the test header and closed as necessary to support fire pump testing: 2) Line 0FP57A, downstream of the Diesel Driven Fire Pump Engine Heat Exchanger, was revised to reflect the as-built condition that it is 2" pipe and not 4" pipe; 3) The tailpiece on line 0FP258A, downstream of orifice 0FP07M, was annotated as conforming to Pipe Design Table 140BB. The material was changed on this pipe under Work Request 96000595 to stainless steel to address flow induced erosion concerns. This change was identical to that done for the tailpiece on line 0FP257A downstream of orifice 0FP06M. The Electronic Work Control System (EWCS) D033 and D034 panels for both 0FP257A and 0FP258A were revised to reflect that these tailpieces are constructed of stainless steel; 4) A pressure indicator, 0PI-FP150, was shown on P&ID M-52 Sheet 5 downstream of the bypass valve for cooling water pressure control station to the engine heat exchanger. The appropriate EWCS data fields were populated for this new equipment piece number.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because no physical plant changes are incorporated under this activity. This activity does not change any initiating conditions or create failure modes which would impact the probability of occurrence or consequences of accidents evaluated in the SAR.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because this activity does not create any new equipment failure modes. This activity does not have any impact on station equipment or interfacing systems which could introduce an accident or malfunction different than currently evaluated in the SAR.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because this activity does not affect any parameters upon which the Technical Specifications are based.

TECHNICAL REQUIREMENTS MANUAL

Revision 3

DESCRIPTION

The purpose of this Technical Requirements Manual (TRM) Revision was to revise TRM Limiting Condition of Operation (TLCO) 3.4.e, "Reactor Vessel Head Vents." This change replaces the plant shutdown requirement associated with the inoperability of a reactor vessel head vent with the requirement to immediately enter TLCO 3.0.c.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because an accident or transient is defined by the initiators of that event. Operability of the reactor vessel head vents is not considered an initiator or an initiating condition for any Design Basis Accident (DBA) or transient. Operation of the head vents is not assumed in the safety analysis. The operation of these vents is an operator action after the event has occurred, and is only required when there is indication that natural circulation is not occurring, i.e., beyond DBA condition. Furthermore, the results of conservative analyses for beyond design basis events have shown that with the Steam Generators maintained at their safety valve setpoint there is sufficient capacity to maintain the primary system in the safe shutdown condition with significant hydrogen trapped in the primary system using only the reflux mode of heat transfer.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because the proposed change does not involve a physical alteration of the facility. There is no change being made to the parameters within which the plant is operated. There are no setpoints at which protective or mitigative actions are initiated affected by this change. No alteration in the procedures which ensure the plant remains within analyzed limits is being proposed, and no change is being made to the procedures relied upon to respond to an off normal event. The change does not alter assumptions made in the safety analysis. Although conservative analyses of beyond design bases events have been performed to evaluate the long term core cooling capability of the Reactor Coolant System, the probability of such an event occurring is not considered credible in that the likelihood of such an event occurring is not as likely as the least likely event analyzed in the SAR.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because in License Amendment No. 98, the NRC approved the relocation of reactor vessel head vent operability requirements to the TRM. Technical Specifications, therefore, no longer govern reactor vessel heat operability. This activity does not affect any parameter upon which the Technical Specifications are based.

DESIGN CHANGE

D20-0-96-282-001

DESCRIPTION

The purpose of this Design Change was to replace AR3 relays with DC contactors in the breaker closing circuitry of Auxiliary Building Ventilation (VA) System fans 0VA03CA,CB, CC, CD, CE, CF.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because failure of the affected VA fans to start is not an accident initiator for any of the accidents evaluated in the UFSAR. Failure of a VA fan is addressed in Table 9.4-10. Failure of the affected 4160V ESF bus due to an existing AR3 Relay failure is not an existing postulated accident initiator. The failure of the ESF bus due to a new DC contactor failure is not considered a credible postulated accident initiator.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because these changes do not 1) alter any SSCs as described in the UFSAR, 2) result in a revision to the UFSAR, 3) impact any UFSAR wording, numbers, drawing, tables, or figures, 4) alter the function of the Auxiliary Power or VA Systems or components during any plant operating modes, 5) alter any initial conditions or assumptions used in UFSAR accident analyses, or 6) create any new failure modes. Therefore, the proposed changes will not create the possibility of an accident or transient different than those previously evaluated in the UFSAR.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because this activity does not affect any parameters upon which the Technical Specifications are based.

UFSAR REVISION

UFSAR Draft Revision Package 7-262

DESCRIPTION

The purpose of this UFSAR Revision was to remove the second paragraph from Section 10.2.2.2.1, which references an orifice used to provide remote hydrogen flow indication and alarm. The orifice does not and has never existed in the field. This change ensures the field and design drawings are consistent.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because the Hydrogen (HY) System is not required to mitigate any UFSAR related accidents. Additionally, the HY System does not alter the initial conditions of any accidents. Loss of the HY System will not prevent the safe shutdown of the plant since the HY System provides no safety function. As a result, there is no increase in the probability of the accidents or transients described in the UFSAR.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because the HY header is still being monitored via a pressure switch and indicator located downstream of where this orifice was to be located. The Main Generator and stator water hydrogen pressures and flow rates are monitored with alarm function and flow totalizers and the Volume Control Tank hydrogen pressure is monitored with alarm function. Excessive flow from a line break will still be stopped via the excess flow check valve and the associated loss in header pressure will actuate a pressure switch and alert the operating department.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because this activity does not affect any parameters upon which the Technical Specifications are based.

ENGINEERING REQUEST

9900357
9900359

DESCRIPTION

The purpose of these Engineering Requests was to install freeze seals on the Essential Service Water (SX) supply return lines for the 1A Diesel Generator (DG) Jacket Water coolers to repair valves 1SX052A & 1SX057A.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because the freeze seal has the same affect on plant equipment as closing SX isolation valves to 1A DG Jacket Water coolers. The additional weight and flooding were evaluated and are not a concern, and there is no effect on overall required SX System flow. The SX System is also not a radiological barrier. The work was performed with the Unit 1A Diesel Generator out-of-service. The Unit 1B Diesel Generator was operable as required for the applicable mode(s). A failure of the freeze seal will not initiate or alter the initial conditions to any accidents or transients.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because the freeze seal has the same affect on the plant equipment as closing SX isolation valves to 1A DG Jacket Water coolers.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because all Technical Specification requirements were met.

ENGINEERING REQUEST

9900358
9900361

DESCRIPTION

The purpose of these Engineering Requests was to install freeze seals on Essential Service Water (SX) supply return lines for the 1B Diesel Generator (DG) Jacket Water coolers to repair valves 1SX052B & 1SX057B.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because the freeze seal has the same affect on plant equipment as closing SX isolation valves to 1B DG Jacket Water coolers. The additional weight and flooding were evaluated and are not a concern, and there is no effect on overall required SX System flow. The SX System is also not a radiological barrier. The work was performed with the Unit 1B Diesel Generator out-of-service. The Unit 1A Diesel Generator was operable as required for the applicable mode(s). A failure of the freeze seal will not initiate or alter the initial conditions to any accidents or transients.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because the freeze seal has the same affect on the plant equipment as closing SX isolation valves to 1B DG Jacket Water coolers.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because all Technical Specification requirements were met.

ENGINEERING REQUEST

9901054

DESCRIPTION

The purpose of this Engineering Request was to address the temporary removal of the concrete slab roof hatches on the Main Steam Isolation Valve (MSIV) room roof structures. The temporary removal is a safety concern due to the fact that these concrete hatches provide necessary weather protection, provide projectile missile protection, are part of the security boundary, and are part of the ventilation/environmental qualification (EQ) boundary for the safety related equipment in the MSIV rooms.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because the response to this Engineering Request required specific conditions and applicable compensatory measures to be implemented prior to the start of the removal of these concrete roof hatches. Weather conditions need to be such that the threat of severe weather, i.e. tornadoes, storms, etc., is unlikely, and therefore weather and missile projectiles were not a concern. Also, maintenance and/or constructions work that may generate a projectile missile or a dropped load could not be in progress in the immediate area if these concrete hatches were to be removed. A posted watch resolved the security concern. The change in the ventilation/EQ had been previously addressed and was determined to be acceptable. Therefore, the removal of the roof hatches does not initiate or alter the initial conditions of any accident as described in the UFSAR and the probability or consequences of an accident is not affected. Since the equipment in the MSIV rooms are not affected by the temporary removal of the concrete roof hatches and are expected to perform as designed, the probability and consequences of a malfunction of equipment important to safety is not altered.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because the removal of the concrete roof hatches is administratively controlled to only occur when missile generation is unlikely, the possibility of an accident different that those analyzed concerning security, ventilation/EQ, and a Main Steam linebreak does not exist. The removal and subsequent re-installation of the concrete slab hatches was controlled by Station procedures.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because this activity does not affect any parameters upon which the Technical Specifications are based.

DOCUMENT CHANGE REQUEST

990231

DESCRIPTION

The purpose of this Document Change Request was to revise drawing M-52, Sheet 13 to change the test connection isolation valve number from 0FP899J to 0FP900B for charcoal adsorber 0VA09FB; change the test connection isolation valve number from 0FP900B to 0FP899J for charcoal adsorber 0VA05FI and change "QB" to "OB" in the name description of charcoal adsorber 0VA09FB. The charcoal adsorber number was changed from 0VA05FJ to 0VA05FI in the schematic for deluge valve 0FP428J and in the title block on drawing 20E-0-4030FP10.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because the proposed activity is a "drawing change only" to ensure that all documentation matches the as-built configuration of the plant. There is no impact on plant equipment or plant operation. The capability of existing plant equipment to function as required during all operational and accident modes is not compromised. No new failure mechanisms or modes are introduced that could affect the likelihood of a failure of existing plant equipment. All plant equipment remains available to mitigate the consequences of evaluated accidents. The initiating conditions or accidents/transients evaluated in the SAR are not affected.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because the proposed activity is a "drawing change only" to ensure that all documentation matches the as-built configuration of the plant. This change updates the affected drawings to ensure that all documents are consistent. No new failure modes are introduced. There is no impact on plant equipment or plant operation. This change does not create the possibility of an accident not previously evaluated.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because this activity does not affect any parameters upon which the Technical Specifications are based.

NUCLEAR WORK REQUEST (NWR)

990088175
990088142

DESCRIPTION

The purpose of these Nuclear Work Requests was to support maintenance associated with 0SX165A and 0SX165B, Essential Service Water (SX) return header isolation valves. The activities include a partial stroke of the valves for post maintenance verification. The evaluation was performed to document the acceptability of performing a partial stroke of the valves with the SX System in service.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because each return header is capable of supporting two-unit (four train/two pump) operation. The partial stroke of a single valve will have no effect on actual system operation. Since the SX System discharge headers are completely crosstied between the units and the safety trains, there is no potential for loss of any safety train should one of the valves inadvertantly close.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because the single failure of a return header isolation valve going to the full closed position will not initiate any accident or transient. System flows would be diverted to the opposite return header without operation action or further valve manipulations with no impact on system operation.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because the operation of the specific isolation valves is not specified in any Technical Specification although they are implied to be open to support train operability. Partial stroking of the valves is required to verify functionality to insure isolation capabilities and will not affect system operation.

UFSAR REVISION

UFSAR Draft Revision Package 8-044

DESCRIPTION

The purpose of this UFSAR Revision was to incorporate the following changes : 1) The component description of the Chemical and Volume Control (CV) System letdown orifices (Section 9.3.4.1.2.5) was revised/clarified to reflect that one or more orifices are operated in parallel to establish the required letdown flow rate to support all system operational requirements. Table 9.3-2 was revised to indicate the range of normal operational letdown flows and corresponding charging flow rates. 2) The description of Residual Heat Removal (RH) Pump NPSH was revised in Section 6.3.2.2 to be consistent with design criteria determined in Calculation CS-5 and the discussion in Section 6.5.2.2 for the Containment Spray (CS) Pumps. Table 5.4-8 was revised to include an NPSH required value for pump operation at runout (5000 gpm). 3) The description of CS Pump NPSH design criteria and requirements were revised to clearly distinguish between CS and RH Pump requirements while taking suction from the containment recirculation sump. In addition , the design criteria values are revised to be consistent with calculation CS-5 Revision 3.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because no physical changes are being incorporated under this activity. The initiating conditions for any accident are not impacted by this activity. This activity has no impact on equipment necessary to mitigate the consequences of accidents or transients evaluated in the UFSAR.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because this activity does not incorporate any physical changes to the plant and no new failure mechanisms or modes are created by the implementation of this activity. Therefore, the changes to description of letdown orifice operation and CS and RH NPSH cannot created an accident or malfunction different from those evaluated in the UFSAR.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because this activity does not affect any parameters upon which the Technical Specifications are based.

FIRE PROTECTION REPORT (FPR) REVISION

FDRP 19-017

DESCRIPTION

The purpose of this Fire Protection Report Revision was to reflect the installation of fire-resistant carpeting over the existing vinyl asbestos file floor in the Chemistry offices. In addition, the rooms designated in the description as the Radiation Supervisors Office, Supply Room, and Supervisors office were designated as Chemistry offices.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because the installation of fire-resistant carpeting will not increase the probability of the occurrence of the design-basis fire. As described in Section 2.1.4.4, paragraph g, of the Fire Protection Report, all carpet installations and replacements that have a Class I rating in accordance with industry standards for flammability, ignition, and smoke density can be ignored when calculating the fire loading. The vendors test report indicates that the installed carpeting has a Class I rating and satisfies the ASTM E-648 standard for flammability, the DOC-FF1-70 standard for ignition, and the ASTM E-662 standard for smoke density. Therefore, even though the carpeting has been identified as a combustible material in Section 2.3.11.55 of the Fire Protection Report, this material can be ignored when calculating the fire loading. In addition, installation of the fire-resistant carpeting will not increase the probability of occurrence of a malfunction of equipment important to safety.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because installation of fire-resistant carpeting in offices located in Fire Zone 11.6B-0 does not create the possibility of an accident or transient of a different type than previously evaluated. The new carpeting has a Class I rating in accordance with the flammability, ignition, and smoke density criteria identified in Section 2.1.4.4, paragraph g, of the Fire Protection Report. The carpeting does not affect the system, structures, or components of this fire zone and does not compromise any fire protection features. The floor in this fire zone carries no fire rating and the fire-resistant coverings on the columns and beams are not affected. The concrete masonry walls and Thermafiber insulation at the top of the wall are also not affected.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because this activity does not affect any parameter upon which the Technical Specifications are based.

UFSAR REVISION

UFSAR Draft Revision Package 7-178

DESCRIPTION

The purpose of this UFSAR Revision was to correct the description of the River Screen House air compressors in Section 9.3.1.2 to accurately reflect the configuration at both Byron and Braidwood Stations.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because no physical changes are being incorporated under this activity. The initiating conditions for any accident are not impacted by this activity. This activity has no impact on equipment necessary to mitigate the consequences of accidents or transients evaluated in the UFSAR.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because this activity does not incorporate any physical changes to the plant and no new failure mechanisms or modes are created by the implementation of this activity. Therefore, the descriptive changes to the River Screen House air compressors in the UFSAR cannot create an accident or malfunction different from those evaluated in the UFSAR.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because this activity does not affect any parameter upon which the Technical Specifications are based.

OFFSITE DOSE CALCULATION MANUAL REVISION

Revision 4

DESCRIPTION

The purpose of this Offsite Dose Calculation Manual (ODCM) Revision was to: delete references to the Current Technical Specifications; update the nearest resident information; update the nearest meat animal and dose factors; and made other editorial corrections.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because the changes to the ODCM do not affect plant equipment or operation and therefore, do not affect the probability of occurrence or the consequences of an accident or malfunction.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because the changes to the ODCM do not affect plant equipment or operation and therefore, do not create the possibility for an accident or malfunction of a different type.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because this activity does not affect any parameter upon which the Technical Specifications are based.

TEMPORARY MODIFICATION

99-1-017

DESCRIPTION

The purpose of this Temporary Modification (TMOD) was to install ultrasonic feedwater flow instrumentation downstream of flow venturi 1FE-0520 on line 1FW03CB-16" in the Unit 1 Steam Tunnel. The brackets for the ultrasonic transducers require the removal of approximately 6' of insulation to support their installation and scaffolding to access the lines. Data acquisition equipment will be located near the scaffolding accessing the transducer brackets on a portable cabinet, cart, or table.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because this activity does not impact the initiating conditions or consequences of any accident. Therefore, there is no affect on the probability of occurrence or consequences of any accident.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because there is no change in the normal operation of any equipment created by this activity. No new failure modes are created by this TMOD that could create a different accident or malfunction than currently evaluated in the UFSAR.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because this activity does not affect any parameters upon which the Technical Specifications are based.

ENGINEERING REQUEST

ER 9802133

DESCRIPTION

The purpose of this Engineering Request was to install a freeze seal on line 0FP275A-1 ½" upstream of valve 0FP638 to repair the valve.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because the installation of the freeze seal does not change any initiating condition or impact any accidents and transients evaluated in the UFSAR nor can it initiate a design basis fire as describe for Fire Zone 5.4-1. The ability of the Fire Protection (FP) System to mitigate the consequences of a fire are not affected as long as compensatory actions are in place as required by Station procedures. A protective curtain and floor berm were in place to protect electrical equipment from spray in the event the freeze plug failed. The additional weight of the freeze seal assembly has been evaluated. The FP System is not a radiological barrier.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because any leak by or spray from a failed freeze plug will be contained by the temporary curtain and floor berm and no equipment will be affected. Compensatory actions will be in place as required by Station procedures. The remainder of the FP System was be able to perform its design function.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because this activity does not affect any parameter upon which the Technical Specifications are based.

TECHNICAL REQUIREMENTS MANUAL

Revision 3

DESCRIPTION

The purpose of this Technical Requirements Manual (TRM) Revision was to revise Appendix O, "Safety Function Determination Program (SFDP)," to take full advantage of the allowances of Technical Specifications (TS) Limiting Conditions of Operation (LCO) 3.0.6. Currently, the SFDP conservatively directs entry into the supported system LCO when a supported system LCO is not met due solely to support system LCO not being met, but delays entry by the Completion Time of the support system. The proposed change would preclude entry into the supported system LCO unless directed by the support system Required Action.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because the SFDP ensures the appropriate Actions are taken upon failure to concurrently meet two or more TS LCOs such that multiple inoperabilities of SSCs do not result in an undetected loss of safety function (LOSF). In so doing, the SFDP ensures that the lowest functional capability or performance levels of equipment required for safe operations of the facility are met. The proposed changes are consistent with the requirements of TS LCO 3.0.6 and TS 5.5.15, "Safety Function Determination Program (SFDP)," and the SFDP continues to ensure that there is no LOSF given multiple inoperabilities of SSCs. As such, the accident analyses are not impacted by the proposed changes to the SFDP.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because the proposed changes improve the clarity of licensing requirements. There are no physical changes being proposed to any SSC. As discussed above, the functions of SSCs are not affected. The proposed changes to the SFDP are consistent with the requirements of TS LCO 3.0.6 and TS 5.5.15. The SFDP continues to ensure that the proper actions are taken upon failure to concurrently meet two or more TS LCOs such that multiple inoperabilities of SSCs do not result in an undetected LOSF.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because the proposed changes are consistent with TS LCO 3.0.6 and TS 5.5.15.

ENGINEERING REQUEST

ER 9901715

DESCRIPTION

The purpose of this Engineering Request was to install 2 freeze seals on line 0PW09A-3" upstream of the valve 0PW060 for repair/replacement of the valve.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because the installation of a freeze seal on the Primary Water (PW) System does not change any initiating condition or impact any accidents and transients evaluated in the UFSAR. The additional weight of the freeze seal assembly and flooding have been evaluated. Any potential radioactive water would be contained in the Auxiliary Building with no uncontrolled release to the environment.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because potential flooding has been addressed which is the only accident affected by a failed freeze seal. If the freeze fails, it may be necessary to temporarily shutdown the PW System. The PW System is non-safety related and not relied upon to function during or after an accident or transient.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because this activity does not affect any parameter upon which the Technical Specifications are based.

DOCUMENT CHANGE REQUEST

DCR 9900168

DESCRIPTION

The purpose of this Document Change Request was to revise the Electrical Load Monitoring System for AC Loads (ELMS-AC) database to correct the motor brake horsepower (BHP) input values used for fans in the HVAC systems for the Auxiliary Building (VA), Control Room (VC), Diesel Generator Room (VD), Miscellaneous Electric Equipment Room (VE), Containment (VP) and Switchgear rooms (VX). This change also revised UFSAR Table 8.3-5 and the associated text to indicate the Brake Horsepower (BHP) values listed are original design values and that the ELMS-AC program is used to document and evaluate individual motor load requirements and overall EDG loading.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because the change to the Auxiliary Power (AP) System loading will not alter the response of the plant to any transients, so the analysis of the consequences remains unchanged. The increase in loading is within the capacity of the AP System and Diesel Generators (DGs) for the modeled conditions including worst case Design Basis Accident (DBA) loading. Therefore, the AP system and DGs will still be able to supply the required loads in response to a loss of offsite power, either during normal operations or concurrent with a DBA. Since the distribution components and sources are not overloaded, the potential for failures of distribution components is not affected.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because the BHP values used in Braidwood and Byron ELMS-AC databases are intended to represent the worst design load for the motors for each of the modeled load conditions. The BHP values used in ELMS-AC are the analytical values based on design limits and do not represent expected normal loading. Therefore, the change in the modeled BHP does not represent a change in the operation of the system. The increases in the modeled BHPs for the different fan motors will cause an increase in modeled loading for the AP System and the DGs. Therefore, operation of the AP system is not affected by the load changes. Since AP system operation is not affected, there will be no change in the operation of equipment powered by the AP system. Since the loading is within the capacity of the EDGs, there is also no change in operation of the EDGs.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because this activity does not affect any parameter upon which the Technical Specifications are based.

TECHNICAL REQUIREMENTS MANUAL REVISION

Revision 5 (Section 3.1.k)

DESCRIPTION

The purpose of this Technical Requirements Manual Revision was to add another condition that would allow all the control rods to be withdrawn (all rods out-ARO) from the core during the execution of rod drop testing and the Digital Rod Position Indication operability procedure. A restriction was placed on the ARO rod drop test such that the Reactor Coolant System (RCS) must be borated to a sufficient concentration to ensure the reactor is shutdown with a K_{eff} less than or equal to 0.987.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because the RCS is being borated to a higher boron concentration to allow all control and shutdown rods to be withdrawn. No new failure modes are being introduced. No assumptions to the safety analysis are being changed so the accident consequences are not changed.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because keeping the RCS at a higher boron concentration ensures the reactor will remain shutdown while withdrawing control rods. The accident bounds this condition.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because with the plant this configuration all rods out and heavily borated the reactor is sufficiently sucritical.

UFSAR REVISION

UFSAR Draft Revision Package 8-051

DESCRIPTION

The purpose of this UFSAR Revision was to clarify that in the event one of the Residual Heat Removal (RHR) Pumps cannot be realigned to the hot legs through Motor Operated Valve (MOV) SI8840 at the time of hot leg switchover, flow from one Safety Injection (SI) Pump to the hot legs is adequate to prevent boron precipitation in the core. All other flow requirements assumed in the Large Break Loss of Coolant Accident (LOCA), Small Break LOCA, hot leg switchover and post-LOCA long term core cooling analysis still remain the same. The change clarifies the description in the UFSAR and has no effect on plant operation.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because this revision clarifies that hot leg flow is only required from on SI Pump to meet the hot leg flow requirements to prevent boron precipitation in the core. This change will not increase the probability of a LOCA or the probability of mitigating a LOCA or any other accident or transient.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because the revision clarifies the requirements for hot leg flow to prevent potential boron precipitation in the core. This change addresses the requirements following an accident. This change does not create the possibility of a new accident or transient because the requirements for mitigation of potential boron precipitation are met with flow from only one SI Pump. Total flow to the core is not changed by this revision. All other flow requirements assumed in the Large Break Loss of Coolant Accident (LOCA), Small Break LOCA, hot leg switchover and post-LOCA long term core cooling analysis still remain the same.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because the ability to mitigate the consequences of potential boron precipitation are met with flow from only one SI Pump.

TEMPORARY MODIFICATION

TMOD 99-0-010

DESCRIPTION

The purpose of this Temporary Modification was to install an alternate flow path from the sodium aluminate pumps to the 0A Clarator (0WM02DA). The sodium aluminate pump discharge is connected to line 0WMY9A via nylon braided hose. This connection will be broken downstream of the combined pump discharge pressure guage. Valves and fittings, as required, and plastic or tygon tubing will be field routed from the outlet of the pressure guage to a ½" cross fitting on line 0WM87A. The hose effectively bypasses line 0WMY9A.

Line 0WMY9A is blocked with solidified/hardened sodium aluminate. The temporary bypass line installed under TMOD 99-0-10 permits sodium aluminate injection as required to support the operation of the 0A Clarator and the Make-up Demineralizer System.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because the changes to the Make-up Demineralizer pretreatment system under this activity will not change or impact the initiating conditions or events that result in any accident or transient evaluated in the UFSAR. This activity does not reduce the capability of any system relied upon to perform accident mitigation functions.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because the changes incorporated under this activity do not impact any accident or transient initiating condition, nor do they impact systems relied upon to mitigate the consequences of any accident. No failure mechanisms were created by this activity which would impact the operation of the Make-up Demineralizer pretreatment system or any interfacing systems.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because this activity does not affect any parameters upon which the Technical Specifications are base.

DESIGN CHANGE

D20-1/2-99-336

DESCRIPTION

The purpose of this Design Change was to add a ¾" X 1" thermal relief valve on the inside containment chilled water return headers at a location between the inside containment isolation valves 1/2WO056A/B and the outside containment isolation valves 1/2WO020A/B for penetrations 1/2PC-5 and 1/2PC-8. The purpose of the relief valve is to provide a thermal overpressure relief for the isolated water-filled piping sections in containment under a Loss of Coolant Accident (LOCA) or Main Streamline Break condition as discussed in NRC Generic Letter-96-06.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because the reliability of existing equipment is not degraded. The Chilled Water (WO) System is not required for accident mitigation. The potential of containment flooding at post-LOCA due to a stuck open relief valves is not significant since the amount of fluid added will be small. The relief valves are subject to local leak rate testing to verify their seat tightness for containment isolation. Further, the addition of the relief valve does not alter the function, but will increase the reliability of the containment isolation valves/piping during accident condition.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because the relief valves do not adversely impact the WO System ability to supply water to the WO cooling coils during normal plant operation. Plant operation is not changed and now new failure modes are introduced.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because this activity does not affect any parameters upon which the Technical Specifications are based.

DESIGN CHANGE

D20-1/2-96-282-008
D20-1/2-96-282-009

DESCRIPTION

The purpose of these Design Changes was to replace AR3 relays with DC contactors in the breaker closing control circuitry of Essential Service Water (SX) System Pumps 1SX01PA/B and 2SX01PA/B.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because failure to the affected SX Pumps to start is not an accident initiator for any of the accidents evaluated in the UFSAR. Failure of a SX Pump is addressed in Table 9.2-2. Failure of the affected 4160V ESF bus due to an existing AR3 Relay failure is not an existing postulated accident initiator. The failure of the ESF bus due to a new DC contactor failure is not considered a credible postulated accident initiator.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because these changes do not 1) alter any SSCs as described in the UFSAR, 2) result in a revision to the UFSAR, 3) impact any UFSAR wording, numbers, drawing, tables, or figures, 4) alter the function of the Auxiliary Power or SX System or components during any plant operating modes, 5) alter any initial conditions or assumptions used in UFSAR accident analyses, or 6) create any new failure modes. Therefore, the proposed changes will not create the possibility of an accident or transient different than those previously evaluated in the UFSAR.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because this auxiliary does not affect any parameters upon which the Technical Specifications are based.

DESIGN CHANGE

D20-2-97-311

DESCRIPTION

The purpose of this Design Change was to install a linestop in the Unit 2 Essential Service Water (SX) train cross-tie header (2SX13A-36") in the A-Train SX Pump room at the Auxiliary Building elevation 330'. Due to inability of SX isolation valves to isolate flow, linestop equipment is required to insert a stopple to temporarily isolate SX flow leak-by so work can be performed to replace the 2SX033 and 2SX034 valves and to clean/repair the Unit 2 Component Cooling Water (CC) Heat Exchanger. The linestop activities were performed during mode 6.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because the SX and the CC Systems do not initiate or alter the initial conditions of any SAR accidents. The CC Heat Exchanger and affected portion of the SX piping are isolated by out-of-service boundary valves. The linestop machines are supported with temporary supports and engineering has shown that the SX piping maintains its structural integrity for all design basis loads, therefore pressure boundary is maintained. During the linestop activities, both the Unit Common and Unit 1 CC Heat Exchangers continue to be available and the SX supply to plant equipment is not adversely impacted. Therefore, any equipment required to stop or mitigate off site dose will be available.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because there is no change to the SX and CC System function. One SX train of the shutdown Unit (Unit 2) and both SX trains of the operating Unit (Unit 1) are available to support plant operation. While the Unit 2 CC Heat Exchanger is inoperable, the Unit Common and Unit 1 CC Heat Exchangers are available to perform their safety functions as discussed in the UFSAR. Plant operation is not changed and no new failure modes are introduced.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because the safety function of the SX and the CC systems is not changed by the maintenance activities. Plant operation remains within the requirements of Technical Specifications 3.7.7 and 3.7.8.

NUCLEAR WORK REQUEST (NWR)

990096219-01

DESCRIPTION

The purpose of this Nuclear Work Request was to repair the seal around floor plug FS0-2-4 on the 346' elevation of the Auxiliary Building. This floor plug is a flood and ventilation boundary.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because the Auxiliary Building Ventilation (VA) System will still meet its intended functions. The consequences of an accident/malfunction of important to safety equipment is not affected since no new assumptions are being made with regard to the reliance on equipment or equipment performance.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because no uncontrolled radioactive release paths are created by this activity since VA System airflows are unchanged with negligible effects.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because this activity does not affect any parameters upon which the Technical Specifications are based.

CORE OPERATING LIMITS REPORT REVISION

Unit 1, Cycle 8

DESCRIPTION

The purpose of the Core Operating Limits Report (COLR) Revision was to allow operation of Unit 1 Cycle 8 up to a core average burnup of 21,400 MWD/MTU. This will allow the core to operate for the full operating cycle until refueling outage A1R08.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because the core design, including consideration of the effects of the proposed changes, will continue to meet key safety parameter limits. All design and performance criteria will continue to be met and no new failure modes or limiting single failure mechanisms have been created nor will the core operate in excess of pertinent design basis operating limits for the key safety parameters. The demonstrated adherence to these standards and criteria precludes new risks to components and systems that could introduce a new type of accident.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because the core design, including consideration of the effects of the proposed changes, will continue to meet key safety parameter limits. All design and performance criteria will continue to be met and no new failure modes or limiting single failure mechanisms have been created nor will the core operate in excess of pertinent design basis operating limits for the key safety parameters. The demonstrated adherence to these standards and criteria precludes new risks to components and systems that could introduce a new type of accident.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because each of the Technical Specifications and Technical Requirements Manual Limiting Conditions for Operation were reviewed to determine the impact of the core design on the acceptance limits/margin of safety. Operation of Unit 1 Cycle 8, with the introduction of new fuel has been analyzed in accordance with NRC approved methodologies. The core has been designed to operated within safety analysis acceptance limits and will therefore maintain safety margins.

DOCUMENT CHANGE REQUEST

990270

DESCRIPTION

The purpose of this Document Change Request was to change the system designation for the ¾ inch sample line and valve for the Auxiliary Feedwater (AF) diesel engine jacket-water cooler. Lines (2)1SXJ3A and valves (2)1SX249, which currently have the Essential Service Water System (SX) designation, were changed to (2)1AFJ3A and (2)1AF249, respectively. The sample line and valve are connected to the shell side of the jacket-water cooler (2)1SX01K which contains engine cooling water. They are used to draw routine samples of jacket-water for chemical analysis. The lines and valves appear on P&ID's M-42-3 (Unit 1) and M-126-1 (Unit 2) which appear in the UFSAR as sheet 6 of Figure 9.2-2.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because there is no physical change being made to the plant, only the system designation for a sample valve and line are changing. Because there is no change being made to either the plant or the way in which the affected systems (AF and SX) are operated, this change will not increase the probability of occurrence of any previously analyzed transient or accident. A failure of either the sample valve or line will result in a loss of jacketwater to the AF diesel. Depending on the magnitude of the leak, it may or may not be within the capability of the makeup system. None of this is impacted by this activity.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because the failure modes of the valve remain the same (pressure boundary and seat leakage type failure). The failure mode of the ¾ inch sample line also remains the same (pressure boundary failure). None of the failure modes and affects analysis in the UFSAR are impacted by this activity. Additionally, there are no new equipment failure modes introduced.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because this activity does not affect any parameter upon which the Technical Specifications are based.

PROCEDURE REVISION

2BwVS AB-1

DESCRIPTION

The purpose of this Procedure Revision was to revise the Unit 2 Boric Acid Transfer Pump (2AB03P) differential pressure acceptance criteria to reflect the current pump performance reference value after pump rebuild.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because the probability or consequences of previously evaluated accidents are unaffected because the pump has demonstrated on both of the last 2 occasions, since pump rebuild, that it is still capable of delivering the required emergency boration flowrate at the new reference value. Also the new lower limit of the acceptance criteria of pump differential pressure still ensures adequate pump performance for the delivery of 30 gpm boric acid solution to the suction of the Chemical and Volume Control (CV) Pumps under all circumstances. Finally, the negative reactivity function of emergency boration can still alternately be satisfied by two flowpaths from the Refueling Water Storage Tank. The probability or consequences of a malfunction of equipment important to safety is not increased because the pump will continue to be performance tested at the same frequency to detect/trend any pump degradation and this performance testing still includes vibration analysis.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because the described change in pump differential pressure acceptance criteria will not create the possibility of a non-SAR accident or malfunction because this activity does not change the safety function or create new failure modes for this component.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because this activity still ensures adequate pump performance for the delivery of 30 gpm boric acid solution to the suction of the CV pumps under all circumstances.

DESIGN CHANGE

D20-0-99-333

DESCRIPTION

The purpose of this Design Change was to allow for periodic flushing capability of the Chemical Feed (CF) System to the Circulating Water (CW), Non-essential Service Water (WS), and Essential Service Water (SX) Systems. The CF System was originally installed under Modification M20-0-95-003. These changes include the addition of a 55 gallon container which can be temporarily connected to existing WS and CW Pump suction connections to flush the system. Two additional pump suction connections are needed in order to add flushing capability to the SX biocide system.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because this activity does not impact any equipment necessary to mitigate the consequences of any accidents or transients.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because no new failure mechanisms or modes are created by the implementation of this design change. No changes are being implemented that will adversely impact equipment important to safety.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because this activity does not impact any parameters upon which the Technical Specifications are based.

UFSAR REVISION

UFSAR Draft Revision Package 8-055

DESCRIPTION

The purpose of this UFSAR Revision was to revise Section 6.2 to reflect the results of the Westinghouse analysis for the Main Steam Line Break (MSLB) containment response for the original Steam Generators.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because the probability of any accident or equipment malfunction is not increased since this change has no effect on any initiating factors for a Main Steam Line Break Accident. Additionally, the Environmental Qualification temperature analysis remains valid. The consequences are not increased since the containment and other equipment used for mitigation remain below their design temperature throughout the transient.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because there is no change to any component/structure that could create a possibility of a different type of malfunction or accident. This activity revises the UFSAR to reflect the results of the containment response analysis during a Main Steam Line Break event. This change does not create the possibility of a different type of equipment malfunction.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because the margin of safety for Technical Specification LCO 3.6.5 is the difference between the design temperature (280 °F) and the failure point of the containment structure and the liner. No physical changes are being made to the containment structure or liner that would affect the failure point. The short duration of the peak temperature for the Unit 2 MSLB does not result in exceeding the design temperature of 280 °F. Therefore, there is no reduction in margin of safety as described in the basis of any Technical Specification.

TEMPORARY MODIFICATION

99-0-009
99-0-011

DESCRIPTION

The purpose of these Temporary Modifications (TMOD) was to install temporary flood barriers at Doors D-309 and D-286. These doors are located between the 2A and 2B Diesel Oil Storage Tank (DOST) rooms and 1A and 1B DOST rooms respectively. The temporary barriers at doors D-309 and D-286 provide flood protection for the opposite train DOST room during maintenance activities on the submarine door for the affected train.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because the changes incorporated under this activity do not impact any accident or transient initiation condition, nor will they adversely impact any systems relied upon to mitigate the consequences of any accident.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because no new failure mechanisms are created by this activity which could impact the operation of the Diesel Generators or any interfacing and supporting systems.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because this activity does not affect any parameter upon which the Technical Specifications are based.

ENGINEERING REQUEST

9901762

DESCRIPTION

The purpose of this Engineering Request was to install a temporary freeze seal on line 1FC03A-10' downstream of valve 1FC8762B to repair the valve.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because fuel handling activities in the fuel pool are prohibited during the freeze seal process to preclude any fuel handling accidents. Freeze seals are a commonly used and proven industry practice for isolating process fluid lines to perform maintenance. Dewatering protection will prevent reduction of the fuel pool water level to the point required to maintain adequate radiation shielding should the freeze fail. The opposite unit's Spent Fuel Pool Heat Exchanger will be on-line to support plant operations.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because the installation of the freeze seal downstream of valve 1FC8762B does not challenge plant systems or equipment in any way to introduce a new failure or create an accident different than those previously evaluated in the SAR.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because this activity does not affect any parameters upon which the Technical Specifications are based.

NUCLEAR WORK REQUEST (NWR)

990080475

DESCRIPTION

The purpose of this Nuclear Work Request was to remove a floor plug to support maintenance activities involving the Blowdown Demineralizer Tank (0WX01DC). Removal of the floor plug is considered part of a ventilation boundary.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because the accident mitigation function and normal functions of Auxiliary Building Ventilation (VA) System will still continue to maintain the building at a negative pressure, control post accident radioactivity leaking from the ECCS equipment within required limits, and maintain Environmental Qualification Zone requirements for the affected areas.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because the possibility of an accident or malfunction of a different type other than previously evaluated in the UFSAR is not created affecting the safety functions of the Auxiliary Building HVAC system when the floor plug is removed to access 0WX01DC. This activity is unrelated to the sequence of events leading to the initiation of an accident. Since the system's accident mitigation and normal functions will be maintained, the possibility of an accident or malfunction of a different type from those evaluated in the SAR is not created.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because all Technical Specification and differential pressure requirements were met.

NUCLEAR WORK REQUEST (NWR)

990080477

DESCRIPTION

The purpose of this Nuclear Work Request was to remove a floor plug to support maintenance activities involving the Blowdown Demineralizer Tank, (0WX01DD). Removal of the floor plug is considered part of the boundary.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because the accident mitigation function and normal functions of Auxiliary Building Ventilation (VA) System will still continue to maintain the building at a negative pressure, control post accident radioactivity leaking from the ECCS equipment within required limits, and maintain Environmental Qualification Zone requirements for the affected areas.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because the possibility of an accident or malfunction of a different type other than previously evaluated in the UFSAR is not created affecting the safety functions of the Auxiliary Building HVAC system when the floor plug is removed to access 0WX01DC. This activity is unrelated to the sequence of events leading to the initiation of an accident. Since the system's accident mitigation and normal functions will be maintained, the possibility of an accident or malfunction of a different type from those evaluated in the SAR is not created.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because all Technical Specification and differential pressure requirements were met.

NUCLEAR WORK REQUEST (NWR)

990058779

DESCRIPTION

The purpose of this Nuclear Work Request was to prop open Door D-559 to the Unit 2 Main Steam pipe tunnel and the 2A/D Main Steam Isolation Valve (MSIV) room to reduce the temperature in the room while work was being performed. This door is considered part of the ventilation boundary.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because the Unit 2 Main Steam Tunnel and 2 A/D MSIV room Ventilation System is unrelated to the sequence of events leading to the initiation of an accident and it has no mitigating or safety function.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because the proposed activity breaches the ventilation envelope allowing some air to enter the room directly from the outdoors (instead of through the Main Steam Tunnel). While slightly cooler temperatures are expected, no significant difference in temperature is expected and equipment in the area will be maintained at/near normally maintained temperatures. No credit is taken for this ventilation system during an accident or transient condition.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because this activity does not affect any parameters upon which the Technical Specifications are based.

DESIGN CHANGE

E20-1-97-267-002
E20-2-97-267-002

DESCRIPTION

The purpose of these Design Changes was to add a 3/4" x 1" thermal relief valve on the Reactor Coolant Drain Tank (RCDT) Pump discharge piping between the PC-11 inside containment isolation valve 1/2RE1003 and the outside containment isolation valve 1/2RE9170. The discharge of the relief valve is routed back to the RCDT through the 2" accumulator tank drain line. The design change was to address potential thermally induced overpressurization of isolated water-filled piping sections in containment as discussed in NRC GL-96-06.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because the added relief valve does not affect the function of the system. The relief valve will be subjected to local leak rate testing to verify its seat tightness for containment isolation. Further, the addition of the relief valve does not alter the function, but will increase the reliability of the containment isolation valves/piping during accident condition.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because the relief valve does not adversely impact the function of the system during normal or accident conditions. Plant operation is not changed and no new failure modes are introduced.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because this activity does not affect any parameter upon which the Technical Specifications are based.

DESIGN CHANGE

E20-1-97-006
E20-2-97-006

DESCRIPTION

The purpose of these Design Changes was to add a 3/4" x 1" thermal relief valve on the containment floor drain (RF) sump pump discharge piping between the PC-47 inside containment isolation valve 1/2RF026 and the outside containment isolation valve 1/2RF027. The discharge of the relief valve is routed to the reactor building floor drain system. The design change is to address potential thermally induced overpressurization of isolated water-filled piping sections in containment as discussed in NRC GL-96-06.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because the added relief valve does not affect the function of the RF system. The relief valve will be subjected to local leak rate testing to verify its seat tightness for containment isolation. Further, the addition of the relief valve does not alter the function, but will increase the reliability of the containment isolation valves/piping during accident condition.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because the relief valve does not adversely impact the function of the RF system during normal or accident conditions. Plant operation is not changed and no new failure modes are introduced.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because this activity does not affect any parameters upon which the Technical Specifications are based.

DESIGN CHANGE

D20-1-98-343
D20-2-98-343

DESCRIPTION

The purpose of these Design Changes was to upgrade Reactor Coolant Pump (RCP) motor feed breaker protection logic by replacing the existing model CO-11 overcurrent relays with model CO-8 overcurrent relays. The CO-8 relays provide better coordination in the motor protection scheme to prevent inadvertent trips during RCP starting. The design changes also add a second set of COM-5 overcurrent relays to the breaker protection logic to enhance overcurrent protection for the containment penetrations used for the motor feeds.

SAFETY EVALUATION SUMMARY

1. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because the protection relays are used to respond to faults with the RCP motor or power cables to isolate the faults, but do not cause the faults. In the absence of any faults, the relays have no affect on the operation of the RCPs or feed breakers. The relays are not used to initiate trips of power supply to the buses. The relays are part of the control circuits of the feed breakers and have no interaction with protection relays and circuits for other breakers. Therefore, the addition of the relays will not affect the probability of a failure of a RCP, feed cable or power supply to the buses.

2. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because the relays are Class 1E, seismically mounted and qualified to the same requirements as the existing ones. The spare COM-5 relays that are being connected were installed during the original purchase of the switchgear and were included in the initial qualification. Replacement of the CO-11 with CO-8 relays changes the coordination of the devices in the protection scheme, but does not alter the overcurrent protection provided. The CO-8 and CO-11 relays are similar in design and operate in the same manner. The CO-8 relay will provide the same function, in the same manner as the CO-11 relay it is replacing. The CO-8 relay does not add any new functions or features.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because this activity does not affect any parameters upon which the Technical Specifications are based.

TEMPORARY MODIFICATION

98-1-026, Revision 1

DESCRIPTION

The purpose of this Temporary Modification was to disconnect the front card edge connector in the 1PI01JA (Data "A") cabinet for Digital Rod Position Indication (DRPI) for the Decoder/Encoder (D/E) cards for rods J13 and K06.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because this activity affected the DRPI System only, which is an indication only system providing no control functions. The TMOD did not cause a loss of the deviation alarm, and alarm response actions were not changed. The shutdown rod insertion limits assumed in the accident analyses were not changed, thus no changes in reactivity occurred due to this change. This change did not affect radiological barriers. Therefore, the probability of occurrence or the consequences of an accident or malfunction were not increased.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because DRPI indication was placed in half-accuracy. This condition is already discussed in the UFSAR and provided no adverse affects. The setpoint change ensured that the deviation alarm did not activate when a rod was placed into half-accuracy and continued to annunciate as designed when DRPI indication changes for a rod position not penetrating the uppermost coil. The deviation alarm is used to alert operators to abnormal rod positions, but is not relied upon to satisfy Technical Specification Limits. Technical Specification Limits were not exceeded due to this change. This change did not adversely affect or impact any system nor create an accident or malfunction of a different type than previously evaluated.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because this activity does not affect any parameters upon which the Technical Specifications are based.

DESIGN CHANGE

D20-1(2)-347-001
D20-1(2)-347-002

DESCRIPTION

The purpose of these Design Changes was to increase Motor Operated Valves (MOV) 1(2)SI8802A and B overall actuator gear ratio from 28.2:1 to 59.4:1 to increase the operator motor gearing capability. The capability is being increased to prevent pressure locking concerns. The ComEd pressure locking prediction methodology was used to determine the required force to unseat the valves under the postulated scenario using conservative assumptions. As documented in pressure locking calculation BRW 96-015/BYR96-238 an overall actuator gear ration of 59.4:1 provides the required minimum margin (capability) to open the valve under the postulated scenario while not exceeding the maximum valve stroke time listed in the UFSAR.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because the probability of a malfunction of equipment is not increased. Failure of the torque switch to limit the closing thrust to a specified value can occur with any torque switch controlled motor operated valve and is not affected by the thrust capability of the actuator. Therefore, the probability of a failure of the torque switch has not changed. With the increased motor gearing capability and ability to open the valve under a pressure locking condition the overall probability of a valve malfunction is decreased.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because the proposed change will not create the possibility of a different accident or transient. The function of the valve and operator is not being changed. The ability of the valve to perform these functions is not being changed. Valve setup will not be changed with installation of the new overall actuator gear ration. The function of the valve is also not changed. The 7 second delay in initiation of hot leg recirculation based on slower valve stroke time will not affect this function. The new stroke time remains less than the UFSAR maximum stroke time (15 seconds) for these valves. Therefore, the proposed change will not create the possibility of a different type of equipment malfunction than previously evaluated.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because this activity will not reduce the margin of safety as defined in the basis for any Technical Specification. The valve stroke time remains within the licensing basis of the plant.

ENGINEERING REQUEST

9802100
9802101
9802102

DESCRIPTION

The purpose of these Engineering Requests was to install temporary freeze seals on the lines upstream and downstream of orifice flanges 1FE-418, 438, and 448, to replace the orifice flange gaskets. These orifices are part of the Reactor Coolant System (RCS).

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because these lines is not used on modes 5, 6, or defueled. The additional weight of the freeze seal assembly has been evaluated, and any leakage or radiation release from a failed freeze seal would be bounded by the large break Loss of Coolant (LOCA) analysis. The Loop Stop Isolation Valves (LSIVs) will be closed and the RCS will be depressurized.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because the only accident or malfunction is a failed freeze, which is bounded by a large break LOCA (previously analyzed).

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because this activity does not affect any parameters upon which the Technical Specifications are based.

DESIGN CHANGE

D20-2-96-282-006

DESCRIPTION

The purpose of this Design Change was to replace AR3 relays with DC contactors in the breaker closing control circuitry of Chemical and Volume Control (CV) System Pumps 2CV01PA and 2CV01PB.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because failure to the affected CV Pumps to start is not an accident initiator for any of the accidents evaluated in the UFSAR. Failure of a CV Pump is addressed in Table 9.3-5. Failure of the affected 4160V ESF bus due to an existing AR3 Relay failure is not an existing postulated accident initiator. The failure of the ESF bus due to a new DC contactor failure is not considered a credible postulated accident initiator.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because these changes do not 1) alter any SSCs as described in the UFSAR, 2) result in a revision to the UFSAR, 3) impact any UFSAR wording, numbers, drawing, tables, or figures, 4) alter the function of the Auxiliary Power or CV System or components during any plant operating modes, 5) alter any initial conditions or assumptions used in UFSAR accident analyses, or 6) create any new failure modes. Therefore, the proposed changes will not create the possibility of an accident or transient different than those previously evaluated in the UFSAR.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because this activity does not affect any parameters upon which the Technical Specifications are based.

NUCLEAR WORK REQUEST (NWR)

990080481

DESCRIPTION

The purpose of this Nuclear Work Request was to replace the 2CS01PA motor/pump located in the 2A Containment Spray (CS) Pump room. To access the 2A CS Pump room area, the floor plug located on elevation 364' had to be removed. This floor plug is a ventilation boundary.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because the Auxiliary Building was required to maintain at least –0.3 inches of water during repairs. This will satisfy the requirement for the ECCS pump rooms to maintain a minimum of –0.25 inches of water with respect to outside atmosphere per the UFSAR and Technical Specification requirements.

2. The possibility for an accident or malfunction of a different type than previously evaluated in the UFSAR is not created this work does not have an impact on the events which initiate a Loss of Coolant Accident or a radioactive release accident.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because all Technical Specification and differential pressure requirements were met.

NUCLEAR WORK REQUEST (NWR)

990088594

DESCRIPTION

The purpose of this Nuclear Work Request was to hydrolase floor drains located in the Unit 2 Curved Wall Area (CWA). To support this activity, Door D-278 had to be propped open to allow routing of hydrolasing lines from elevation 364' general area into the Unit 2 CWA. Door D-278 is part of the ventilation boundary.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because the Auxiliary Building was required to maintain at least –0.3 inches of water during repairs. This will satisfy the requirement for the ECCS Pump rooms to maintain a minimum of –0.25 inches of water with respect to outside atmosphere per UFSAR and Technical Specification requirements.

2. The possibility for an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because this work does not have an impact on the events which initiate a Loss of Coolant Accident or a radioactive release accident.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because all Technical Specification and differential pressure requirements were met.

DESIGN CHANGE

D20-1-99-335

DESCRIPTION

The purpose of this Design Change was to install a 3/4" drain valve (1AS366) on 1ASG3A-4" upstream of isolation valve 1MS163 in the Turbine Building. The Auxiliary Steam (AS) system supplies start up steam to Gland Sealing Steam (GS) system. This change provides the means to drain the condensate accumulation in the AS line upstream of isolation valve 1MS163.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because the affected portion of the AS system is in the Turbine Building. The probability of high energy line break (HELB) affecting safety equipment is not affected. This portion of AS is not described or specifically referred to, in any of the accident and transient events described in the SAR. The new drain line is designed to the same standards as the existing system piping. Therefore, the probability of a steam system piping failure is not increased. These lines are not part of a radioactive boundary. A failure of the drains is bounded by the existing analysis in UFSAR Sections 15.1.5 and 15.1.6. The proposed activity does not increase the consequences of any accident evaluated in SAR.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because the intended function, the methods of performing the function, and the operating condition and parameters of the AS System remain unchanged. Therefore, the proposed activity does not create the possibility of an accident or transient of a different type than previously evaluated. The interaction of the AS System with the Main Steam/Gland Sealing Steam Systems is not changed. Therefore, the proposed activity will not create the possibility of a different type of malfunction of equipment important to safety than previously evaluated.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because this activity does not affect any parameters upon which the Technical Specifications are based.

NUCLEAR WORK REQUEST (NWR)

990025623
990025608

DESCRIPTION

The purpose of these Nuclear Work Requests was to hydrolaze lines located in the Unit 1 Curved Wall Area (CWA). To support this activity, door D-255 had to be propped open to allow routing of hydrolasing lines from elevation 364' general area into the Unit 1 CWA. Door D-255 is part of the ventilation boundary.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because the Auxiliary Building was required to maintain at least –0.3 inches of water during repairs. This will satisfy the requirement for the ECCS Pump rooms to maintain a minimum of –0.25 inches of water with respect to outside atmosphere per UFSAR and Technical Specification requirements.

2. The possibility for an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because this work does not have an impact on the events which initiate a Loss of Coolant Accident or a radioactive release accident.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because all Technical Specification and differential pressure requirements were met.

NUCLEAR WORK REQUEST

990088594

DESCRIPTION

The purpose of this Nuclear Work Request was to hydrolaze lines from the Auxiliary Building general area into the U-2 containment chiller room for cleaning various blocked floor drains. To perform this work, Door D-306 had to be propped open to allow routing of hoses. This door is considered an ventilation boundary.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because the accident mitigation function and normal functions of the Auxiliary Building Ventilation (VA) System will still continue to maintain the building at a negative pressure, control post accident radioactivity leaking from the ECCS equipment within required limits, and maintain environmental qualification zone requirements for the affected areas.

2. The possibility for an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because the Auxiliary Building HVAC system and Door D-306 is unrelated to the sequence of events leading to the initiation of an accident. Since the system's accident mitigation and normal functions will be maintained, the possibility of an accident or malfunction of a different type from those evaluated in the SAR is not created.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because all Technical Specification and differential pressure requirements were met.

NUCLEAR WORK REQUEST (NWR)

990088595

DESCRIPTION

The purpose of the Nuclear Work Request was to hydrolaze the floor drains within the Filter Valve Aisle #2. To perform this work, Doors D-293 and D-294 had to be propped open to allow the routing of hoses. These doors are considered part of the ventilation barrier.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because the proposed activity will not impact any accident or transient initiating condition, nor will it adversely impact any systems relied upon to mitigate the consequences of any accident.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because no new failure mechanisms are created by the proposed activity that could impact the operation of the Auxiliary Building Ventilation System or any interfacing and supporting systems.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because this activity does not affect any parameters upon which the Technical Specifications are based.

DESIGN CHANGE

D20-2-96-308

DESCRIPTION

The purpose of this Design Change was to implement the following changes to the Off-Gas Filter System (OG): 1) replace Off-Gas Filter Unit (OGFU) inlet valve 2OG037 with a blind flange, 2) replace bypass valve 2OG035 with a flanged spoolpiece, 3) cap the instrument air supply to the 2OG035 and 2OG037 valve operators, 4) remove the hi-radiation interlock signal from radiation detector 2RE-PR027 that starts the Off-Gas Exhaust Fan (0OG01C), 5) remove the solenoids, cabling, and interlocking control functions that reposition the 20OG035 and 2OG037 valves when the Off-Gas Exhaust Fan starts. These changes permanently bypass the OGFU and direct all Unit 2 Off-Gas effluents to the Unit 2 Stack. The installation of the design change interfaces with the Unit 1 OG System since these system share the common OGFU.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because the occurrence of Steam Generator tube leakage is governed by factors such as method of fabrication, metallurgy, chemistry, etc. The operation or non-operation of the OGFU has no effect on the probability of occurrence of tube leakage. Calculation BRW-99-0468-M determined that the increase in thyroid dose associated with the abandonment of the OGFU is insignificant and within federal limits for primary to secondary leakage assumed to determine compliance with 10CFR50 Appendix I.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because the OGFU is designed for normal operation with Steam Generator tube leakage. The system is normally in standby with exhaust gases bypassing the OFGU. The proposed change, therefore, will not impact the operation of the steam jet air ejectors, gland exhausters, or hogging pump function to support maintaining a vacuum in the main condenser. In addition, the proposed change does not affect the safety function of any systems or components. Reliance on the OGFU to maintain off-site dose within established limits is not necessary. Actions will be initiated prior to challenging these limits based on Technical Specification requirements and the permanent abandonment of the OGFU will not result in increased risk to the general public.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because since plant operation will continue to be in accordance with the controls of the Offsite Dose Calculations Manual and doses will be maintained within the criteria of 10CFR50 Appendix I and 10CFR20.

NUCLEAR WORK REQUEST (NWR)

980098819

DESCRIPTION

The purpose of this Nuclear Work Request was to work on damper 2VV01CB in the 2A/D Main Steam Isolation Valve (MSIV) room. To perform this work Door D-559 was opened to provide cool air to the personnel performing the work. This door is considered part of a ventilation boundary.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because the proposed activity breaches the ventilation envelope allowing some air to enter the room directly from the outdoors (instead of through the Main Steam Tunnel). While slightly cooler temperatures are expected, no significant difference in temperature is expected and equipment in the area will be maintained at/near normally maintained temperatures. No credit is taken for this ventilation system during an accident or transient condition.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because the Unit 2 Main Steam Tunnel and 2A/D MSIV room Ventilation System is unrelated to the sequence of events leading to the initiation of an accident and has no mitigating or safety function.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because this activity does not affect any parameters upon which the Technical Specifications are based.

PLANT BARRIER IMPAIRMENT

DESCRIPTION

The purpose of this Plant Barrier Impairment (PBI) was to prop open Door D-560, open the roof hatches for the 2B/C Main Steam Isolation Valve (MSIV) room, and/or open the exhaust dampers. These changes were made to reduce the temperature in the MSIV room while work was being performed. These components are considered part of the ventilation boundary.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because the Unit 2 Main Steam Tunnel and 2B/C MSIV Room Ventilation System is unrelated to the sequence of events leading to the initiation of an accident and has no mitigating or safety function.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because the proposed activity breaches the ventilation envelope allowing some air to enter the room directly from the outdoors (instead of through the Main Steam Tunnel). While slightly cooler temperatures are expected, no significant difference in temperature is expected and equipment in the area will be maintained at/near normally maintained temperatures. No credit is taken for this ventilation system during and accident or transient condition.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because this activity does not affect any parameters upon which the Technical Specifications are based.

UFSAR REVISION

UFSAR Draft Revision Package 8-062

DESCRIPTION

The purpose of this UFSAR Revision was to provide a more accurate description of the operation of the Chemistry Laboratory Ventilation System (VL), specifically related to differential pressures between rooms within the Chemistry Laboratory Complex.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because the VL System is unrelated to the sequence of events leading to the initiation of an accident and it has no mitigating or safety function. The spread of any airborne activity is prevented by using the system fume hoods and good ALARA practices. Any contaminated air that might infiltrate into the adjacent areas (Auxiliary Building) will be filtered by VA which is a safety related exhaust filtration system at least as efficient as VL. The change to the UFSAR description will have no impact on the probability or consequences of any accident or transient described in the SAR.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because the only difference between the current and revised UFSAR assumptions is that localized contamination of the auxiliary building areas adjacent to the laboratory areas may occur. This would only occur if laboratory areas became contaminated, which historically has not occurred. Chemistry activities with the potential to create airborne radioactivity are conducted within the VL fume hoods, minimizing the potential for contaminating the Auxiliary Building. If contamination of the auxiliary building were to occur, appropriate filtration would be provided by VA

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because this activity does not affect any parameters upon which the Technical Specifications are based.

PROCEDURE REVISION

NSP CC-AA-201, BwAP 110-3, BwAP 1110-3a3, BwAP 1110-3a5, BwAP 1110-3A6, BwAP 1110-3A7, BwAP 1110-3A8, BwAP 1110-3A9, BwAP 1110-3A10, BwAP 380-3, BwAP 380-3A1, BwAP 380-3A2, BwAP 380-3T2, BwAP 1110-1A7, BwAP 1110-1A7-A1, BwAP 1110-1A7-A2, BwAP 1110-1A7-B1, BwAP 1110-1A7-B2, BwAP 1100-14

DESCRIPTION

The purpose of this Procedure Revision was to implement a standardized procedure describing the Plant Barrier Control Program, CC-AA-201, Revision 1. NSP CC-AA-201 will be the main document that describes the general requirements and guidance on actions necessary to administratively process, evaluate and compensate for impaired fire, ventilation, security, radiation, flood, high energy line break (HELB), and missile barriers.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because the probability of an accident is not increased by the changes made in these procedures because the procedures either, a) still required review of barrier impairment on operability of essential equipment, or b) have been pre-reviewed for impact on operability of essential equipment. Any compensatory measures will be prescribed in an approved site document, screened in accordance with 10CFR50.59, or meet specific criteria such that the barrier is returned to its design basis configuration prior to the barrier being challenged. The proposed activity will mitigate the affects of an accident and will not increase the probability of occurrence of an accident. The changes will not increase the consequences of an accident since the combination of installed barriers and compensatory measures will function to mitigate the affects of the accident.

2. The possibility for an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because this activity will have no effect on equipment failures and will not create the possibility of a different type of malfunction of equipment important to safety. These procedure address the administrative actions required to control the impairment of plant barriers and will not create the possibility of a different type of malfunction of equipment important to safety.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because this activity does not affect any parameters upon which the Technical Specifications are based.

EXEMPT CHANGE

D20-1(2)-99-349-001
D20-1(2)-99-349-002

DESCRIPTION

Motor operated valves 1(2)ES001 and 1(2)ES007 have an overall actuator gear ratio that is non-locking. These valves also have stem and stem nut configurations that are non-locking. This combination creates a situation that allows the actuator gear train to back drive after the valve has electrically closed and the motor has de-energized. The purpose of this Exempt Change for motor operated valves 1(2)ES001 and 1(2)ES007 was to install a revised overall actuator gear ratio that is locking. This locking gear set will not allow the actuator to back drive due to forces exerted by the stem and compensating spring in the closed position. The locking action of the new worm and worm gear is created by a decrease in thread angle on the worm and worm gear. The 1(2)ES001 valves had their overall actuator ratio changed from 34.56:1 and 29.76:1 respectively to 43.87:1 which increased the stroke time from approximately 13 seconds to approximately 19 seconds. The 1(2)ES007 valves had their overall actuator ratio changed from 27.68:1 to 43.87:1 which increased the stroke time from approximately 17 seconds to approximately 24 seconds.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because the overall actuator ratio change will increase the thrust capability of the valve to open and close and ensure the valve remains seated after closure. This improved reliability of the valve. The change increased the time for isolation of the extraction steam line, however, based on calculation BRW-99-0487-M, the allowed closure time for the valves of 42 seconds is greater than the revised closure time of 25 seconds. The valve function of preventing water from backing up from the feedwater heater and entering the turbine remains unchanged.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because the function of the valve and operator was not changed. The ability of the valve to perform this function was not changed.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because this activity does not affect any parameters upon which the Technical Specifications are based.

NUCLEAR WORK REQUEST (NWR)

980048379-04

DESCRIPTION

The purpose of this Nuclear Work Request was to drain freon from the Unit 1 Containment Chiller. To perform this work, Door D-305 had to be propped open to allow routing of hoses. This door is considered a ventilation boundary.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because the accident mitigation function and normal functions of the Auxiliary Building Ventilation (VA) System are unaffected since 1) the building will continue to be maintained at a negative pressure, 2) post accident radioactivity leaking from the ECCS equipment will be controlled within the required limits, and 3) environmental qualification zone requirements will be maintained for the affected areas.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because the Auxiliary Building Ventilation System and door D-305 are unrelated to the sequence of events leading to the initiation of an accident. Since the system's accident mitigation and normal functions will be maintained, the possibility of an accident or malfunction of a different type from those previously evaluated in the SAR is not created.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because this activity does not affect any parameters upon which the Technical Specifications are based.

ENGINEERING REQUEST

ER9802211

DESCRIPTION

The purpose of this Engineering Request was to install a freeze seal on line 0FP195A-4" upstream of valve 0FP488 to perform maintenance on valve 0FP488.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because the installation of the freeze seal does not change any initiating condition or impact any accidents and transients evaluated in the UFSAR nor can it initiate a design basis fire as described for Fire Zone 11.7-0. Compensatory actions were in place as required for having valve 0FP488 out-of-service. The added weight of the freeze seal has been evaluated along with flooding concerns and found acceptable. The Fire Protection System is not a radiological boundary. The freeze seal has the same effect on the plant as closing valve 0FP488.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because the temporary freeze seal installation does not impact any other plant equipment (other than the Auxiliary and Fuel Handling Building exhaust filter plenum charcoal adsorbers deluge system) that could initiate or create an accident different from those evaluated in the UFSAR or the design basis fire for Fire Zone 11.7-0 as described in the Fire Protection Report. Compensatory actions were in place while the deluge system is OOS.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because this activity does not affect any parameters upon which the Technical Specifications are based.

UFSAR REVISION

UFSAR Draft Revision Package 8-056

DESCRIPTION

The purpose of this UFSAR Revision was to reflect the changes made to the Administrative Section of the Technical Specifications. The change revises the Improved Technical Specification (ITS) Design Features Section 4.3.2, "Fuel Storage drainage". Previous Technical Specification 5.6.2 stated that the spent fuel storage pool (SFP) is designed and shall be maintained to prevent inadvertent drainage of the pool below elevation 423 feet 2 inches. This elevation was revised to 410 feet 0 inches for both Byron and Braidwood in the ITS. This activity changes UFSAR Section 9.1.3.2, "System Description", line elevation location from four feet to approximately 6 1/2 feet. Also where the cooling water return line terminates above the stored fuel assemblies the word "approximately" was added prior to 6 feet. In addition Section 9.1.3.3, "Spent Fuel Pool Dewatering Protection" was clarified to address the effects on both the SFP cooling and skimmer loop configurations. Changes were also made to Figure 9.1-8, sheet 1 "Diagram of Fuel Pool Cooling and Clean up" (P&ID M-63-1A).

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because this change does not involve an increase in the occurrence or the consequences of an accident previously evaluated. The changes revises the SFP inadvertent drain limit from approximately 423 feet to 410 feet to bound the failure effects of both the SFP cooling and skimmer loops, while considering any failure scenario. The revised value meets the Standard Review Plan (SRP) acceptance criteria of maintaining at least 10 feet above the active fuel, ensuring that adequate radiation shielding is maintained as previously analyzed. There is no physical or operational change being made which would alter the sequence of events, plant response or conclusions of the affected analysis.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because the change does not involve an increase in the probability or possibility of an accident previously evaluated. The initial conditions of the limiting dewatering incidents involve initiating circumstances/failures such as accidental gate openings, gate seal failures, or an open transfer tube. Specifying a revised inadvertent drain limit, which meets the SRP acceptance criteria, is unrelated to the probability of occurrence of the precursors or initiating events.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because the changes made to the Technical Specifications were approved by the NRC in Amendment 101, dated May 3, 1999.

DOCUMENT CHANGE REQUEST

990246

DESCRIPTION

The purpose of this Document Change Request was to revise P& ID drawings M-68 Sheet 6 (Unit 1) and M-140 Sheet 5 (Unit 2), physical drawings M-2616A Sheets 83 (Unit 1) and 83A (Unit 2), and Sentry Equipment Corp. drawing 152-12-012J-4 to reflect the as installed piping configuration in the plant. The changes specifically address the pipe routing and configuration in the High Radiation Sampling System (HRSS) room from the Unit 1 and 2 liquid sample panels (1/2PS25J) to the accumulator tanks (1/2PS06M). The changes address the grab sample sink drain and drip pan drains being 2 separate drains and not common as currently shown on prints.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because the changes being made to the subject drawings involve drain piping or vents and valves that are not connected to nor interact with equipment important to safety. Therefore they cannot increase the likelihood of an accident or malfunction of equipment important to safety. The affected equipment was installed to route spillage away from Chemistry personnel to minimize radiation exposure in the event there was sample panel component failure or relief valve lift. The affected equipment will still function as such, and there is no increase in the probability of the consequences of an accident.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because the sample lines do not interact directly with equipment important to safety and thus will not create a different type of malfunction of equipment important to safety. They are simply drain lines that route waste water or potential spillage to a collection tank.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because this activity doe not affect any parameters upon which the Technical Specifications are based.

PROCEDURE REVISION

BwVS TRM 3.4.f.2-RE

DESCRIPTION

The purpose of this Procedure Revision was to have a new section that allows the VT-2 inspection to be performed using the Reactor Coolant Drain Tank (RCDT) Pump to supply pressure to penetration P-11. During performance of the new test section, the RCDT Pump discharge flow paths are isolated to other plant systems and a RCDT Pump is operating. The pump will be protected from being dead headed by installing a recirculation jumper hose from the pump discharge back to the RCDT. The jumper is subsequently removed as part of the surveillance procedure following the completion of the inspection.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because this activity installs a jumper within non-safety portion of the Containment Equipment Drain (RE) System. The leak detection function of the RCDT, such as for Reactor Coolant Pump (RCP) #2 seals or reactor O-ring seals, will still be available during this activity. However it will not be required due to plant conditions while this activity is performed. The consequences of RCP seal failure or reactor O-ring seal failure are not affected by this activity.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because the jumper is to be installed within the RE system. It does not breach the reactor containment building or cross-connect the RE system with another system. The RE system is not an initiator in any accident scenario. The containment isolation function of this system is not affected.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because this activity does not affect any parameters upon which the Technical Specifications are based.

FIRE PROTECTION REPORT (FPR) REVISION

FDRP 19-021

DESCRIPTION

The purpose of this Fire Protection Report (FPR) Revision was to install a liner material (PVC) inside the existing chemical feed biocide pump skid berm. The two existing berm drains (PVC) will be increased in size to accommodate for the liner installation. The addition of liner material and increase in berm drain size does not affect any of the Chemical Feed (CF) System design functions nor does it affect any design drawing details. The fire loading in fire zone 18.12-0 is affected by the increase in combustible material at the Lake Screen House. As a result, the Fire Protection Report (FPR) Fire Hazards Analysis in Section 2.3 and combustible loading FPR Table 2.2-3 is being revised (FDRP 19-021) to include the increase in combustible loading from the added PVC material. The changes to the FPR affect fire zone 18.12-0 (Lake Screen House - Braidwood).

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because the increase in combustible material described in this evaluation does not affect the probability of occurrence of any accident/transient or malfunction of equipment important to safety. The enhancement introduces additional fire loading; however, no new ignition sources are introduced.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because in the event of a fire in the area of the added material, the additional fire severity is only about 6 seconds (.1 minute) and has no impact on the design basis fire or conclusions as stated in the FPR fire hazards analysis for fire zone 18.12-0. The very small fire loading increase will not affect the currently evaluated design basis fire nor create a new type of accident or safety related equipment malfunction.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because this activity does not affect any parameters upon which the Technical Specifications are based.

PLANT BARRIER IMPAIRMENT

DESCRIPTION

The purpose of this Plant Barrier Impairment (PBI) was to prop open Door D-555, open the roof hatches for the 1B/C Main Steam Isolation Valve (MSIV) room, and/or open the exhaust dampers. These changes were made to reduce the temperature in the MSIV room while work was being performed. These components are considered part of the ventilation boundary.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because the Unit 1 Main Steam Tunnel and 1B/C MSIV Room Ventilation System is unrelated to the sequence of events leading to the initiation of an accident and has no mitigating or safety function.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because the proposed activity breaches the ventilation envelope allowing some air to enter the room directly from the outdoors (instead of through the Main Steam Tunnel). While slightly cooler temperatures are expected, no significant difference in temperature is expected and equipment in the area will be maintained at/near normally maintained temperatures. No credit is taken for this ventilation system during and accident or transient condition.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because this activity does not affect any parameters upon which the Technical Specifications are based.

ENGINEERING REQUEST

ER9901675

DESCRIPTION

The purpose of this Engineering Request was to install a freeze seal on the Essential Service Water (SX) return line from the 2B SX Pump cubicle and lube oil coolers downstream of valve 2SX046B to replace valve 2SX046B.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because the installation of the freeze seal does not change any initiating condition or impact any accidents and transients evaluated in the UFSAR. The added weight of the freeze seal has been evaluated along with flooding concerns and was found acceptable. The Essential Service Water System is not a radiological boundary. The freeze seal has the same effect on the plant as closing valve 2SX046B, which makes the 2B SX Pump room cubicle & lube oil coolers inoperable.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because the temporary freeze seal installation does not impact any other plant equipment that could initiate or create an accident different from those evaluated in the UFSAR. The 2B SX Pump will be OOS and the 1B SX Pump will be operable.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because this activity does not affect any parameters upon which the Technical Specifications are based.

TECHNICAL SPECIFICATION BASES REVISION

B3.2.2

DESCRIPTION

The purpose of this Technical Specification Bases Revision was to revise the background section is the Bases for Limiting Condition for Operation 3.2.2, "Nuclear Enthalpy Rise Hot Channel Factor (FNDH), " to include descriptive information regarding the measurement uncertainty associated with FNDH. The added detail is consistent with information contained in the UFSAR and does not alter the Current method for determining FNDH. During conversion from current Standard Technical Specifications (CTS) to Improved Standard Technical Specifications (ITS) this detail was omitted.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because the method of determining FNDH has not changed. The proposed change merely adds clarifying information to the Bases previously contained in CTS. The additional clarifying information is consistent with the UFSAR and the procedure for determining FNDH. Consequently, the safety analyses are not affected. Adding clarifying information to the Bases will not affect equipment failures or malfunctions.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because the proposes change merely adds clarifying information to the Bases previously contained in CTS 3.2.3. The additional clarifying information is consistent with the UFSAR. The method of determining FNDH, as describe in procedure BwVSR 3.2.2.1, is not affected by the proposed change. Therefore, there are no systems, structures or components affected by the proposed Bases change. As such, there are no new failure modes introduced.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because this activity does not affect any parameters upon which the Technical Specifications are based.

DOCUMENT CHANGE REQUEST

990327

DESCRIPTION

The purpose of this Document Change Request was to make numerous minor changes to the following Instrument Air (IA) and Service Air (SA) drawings: M-54-3 (UFSAR Figure 9.3-2 Sheet 4), M-55-1 (UFSAR Figure 9.3-1 Sheet 1), M-55-2K (not in the UFSAR), M-55-3 (UFSAR Figure 9.3-1 Sheet 4).

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because equipment that is important to safety was either designed to perform their safety function without supply air or, in the case of the Pressurizer Power Operated Relief Valves or emergency Diesel Generators, have been designed with their own air supply. This activity does not affect these designs or the loss of supply air failure mode of equipment that is important to safety.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because these changes do not alter the IA or SA Systems to perform functions other than those designed. The containment isolation functions of these systems are not affected by these changes.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because this activity does not affect any parameters upon which the Technical Specifications are based.

MODIFICATION TEST

D20-0-97-001-1

DESCRIPTION

The purpose of this Modification Test was to functionally test the alternate Chemistry Laboratory Ventilation System (VL) supply air intake and its associated components (control valve, high energy line break damper, and fire damper).

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because the probability of an accident is not affected since the VL System does not initiate or alter the initial conditions of any accident. The consequences of an accident/malfunction of important to safety equipment is not affected since the capability to shutdown on a high radiation signal will be maintained.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because the VL System does not initiate or alter the initial conditions of any accident and its capability to shutdown on a high radiation signal will be terminated.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because this activity does not affect any parameters upon which the Technical Specifications are based.

SPECIAL PROCESS PROCEDURE

SPP 99-033

DESCRIPTION

The purpose of this Special Process Procedure was to functionally test the upgrade to the Fuel Transfer Systems for both Unit 1 and 2.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because this equipment is not relied upon to remain functional following a design basis events to ensure the integrity of the reactor pressure boundary, the capability to shutdown the reactor and maintain it in a safe shutdown condition, or prevent, or mitigate the consequences of accidents that could result in potential offsite releases.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because the function of the Fuel Transfer System has not changed. Only the control and drive systems have been affected by upgrading to state-of-the art control technology. No new failure modes are created by these changes. Structural failure modes are not altered. Control systems will fail "as-is". However, the machine is designed to allow manipulation of a fuel assembly to a safe condition using manual controls.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because this activity does not affect any parameters upon which the Technical Specifications are based.

TECHNICAL SPECIFICATION BASES REVISION

B 3.6.3

DESCRIPTION

The purpose of this Technical Specification Bases Revision was to add relief valves installed in response to Generic Letter 96-06 to Bases Table 3.6.3-1, "Primary Containment Isolation Valves." The relief valves were installed to provide thermal overpressure relief under design basis accident conditions. The relief valves were installed inside containment between the inside containment isolation valve and the outside containment isolation valve and are thus categorized as containment isolation valves.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because the probability of occurrence of any accident or transient is defined by the initiators of that event. Revising the Bases to reflect installation of containment isolation valves and modifying the Actions accordingly will not affect the initiator of any event. Therefore, the probability of occurrence of an accident is not increased. Revising the Bases to reflect the installation of containment isolation valves and modifying the Actions accordingly ensures that potential paths to the environment through containment isolation valves are minimized. Therefore, the consequences of an accident are not increased. Furthermore, the Bases change has no affect on equipment failures or malfunctions.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because the systems associated with the affected containment penetration flowpaths will continue to function as designed. These changes provide assurance that the containment function assumed in the safety analysis will be satisfied. No new failure modes are introduced.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because revising the Bases to reflect installation of containment isolation valves and modifying the Actions accordingly ensure the containment function is maintained.

UFSAR REVISION

UFSAR Draft Revision Package 8-040

DESCRIPTION

The purpose of this UFSAR Revision was to modify the section which describes Byron and Braidwood Stations' implementation of the requirements of NRC Regulatory Guide 1.82, Rev. 0. Specifically, the response to regulatory position, Item #10 was revised to account for the potential that the containment spray (CS) nozzle orifices may not be the most limiting restriction in the systems drawing a suction on the containment recirculation sump during a design basis accident. Also, the size of a particle capable of passing through the sump screen was updated.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because the probability of any accident or equipment malfunction is not increased since this change has no effect on any of the initiating factors for any accidents. The consequences are not increased since the design function of the ECCS is maintained based on the physical properties of the debris generated, the available openings through the valves, the flowpath through two centrifugal pumps (Charging and Safety Injection) before reaching the throttle valves, and the high flow velocities at the restrictions within the valves.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because there is no change to any component/structure that could create a possibility of a different type of malfunction or accident. This activity revises the UFSAR to reflect the potential configuration of the throttle valves in the ECCS injection lines. This change does not create the possibility of a different type of equipment malfunction.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because the original documents that discussed compliance with Regulatory Guide 1.82 Revision 0, indicated that the sizing of the recirculation sump screen was in compliance with the specific recommendations of the Regulatory Guide. That is, the screen openings were smaller than any opening in the systems served by the pumps that take suction from the containment recirculation sumps. This information is currently documented in the UFSAR, Appendix A, section "Regulatory Guide 1.82". Byron SER, Section 6.2.2 states "The applicant's sump design conforms to the guidelines in Regulatory Guide 1.82 except that the floor in the vicinity of each sump is level and does not slope gradually down away from the sump to assist in preventing heavier debris from accumulating at the sump". Additionally, another screen was required to be added (this is the existing outer screen) to achieve lower flow velocities. Thus, compliance with the requirements of Regulatory Guide 1.82 was part of the basis for NRC approval of the Byron/Braidwood design. This compliance resulted in establishing an implicit margin of safety.

UFSAR REVISION

UFSAR Draft Revision Package 7-111

DESCRIPTION

The purpose of this UFSAR Revision was to revise the bypass leakage test requirements for nonsafety related ventilation systems. Regulatory Guide 1.140 Revision 1 requires the HEPA filter and/or Charcoal adsorber banks for the Auxiliary Building Equipment Ventilation, Laboratory Ventilation, Primary Containment Ventilation, Primary Containment Purge, and Radwaste Facility Ventilation Systems to be tested to ensure they do not exceed an in-place penetration/by-pass leakage of 0.05%. This activity takes exception to Regulatory Guide 1.140 by changing the in-place penetration/by-pass leakage requirement from 0.05% to 1.0% based on NRC Generic Letter 83-13 and ComEd document CHRON #0302306.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because the affected systems are not related to the sequence of events leading to the initiation of an accident and are not relied upon to mitigate the consequences of an accident.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because changing the allowable in-place filter test penetration from 0.05% to 1.0% will not adversely impact systems or functions so as to create the possibility of an accident or malfunction of a type different from those evaluated in the SAR since no physical changes or operational changes will be made to the ventilation systems. The required change is to the allowable penetration only and no changes to the actual filter housings, filters, or adsorbers will be made. The change to the allowable penetration is only reflected in surveillance procedures associated with the ventilation systems. This change is administrative in nature and has no direct effect on the operation of the plant or equipment.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because the margin of safety, as defined in the basis of the Technical Specifications, is not reduced since off-site doses will continue to be maintained in accordance within the acceptable limits of the Off Site Dose Calculation Manual to ensure conformance to the CFR requirements.

DOCUMENT CHANGE REQUEST

990323

DESCRIPTION

The purpose of this Document Change Request (DCR) was to revise the data panels for pressure indicators to consistently reflect the correct component classification of these pressure indicators, the correct scale range of 0-100 psig and dial size, vendor manual references, and references to replacement part numbers. Nuclear Work Requests replaced the existing pressure indicators with the correct safety-related model with a scale range of 0-100 psig.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because the proposed activities do not change any initiating conditions or events associated with any accident or transient, nor do they change the normal operation of the Diesel Generators (DG). The changes to Electronic Work Control System (EWCS) and implemented under the work requests associated with the 1B and 2A DGs do not adversely affect Diesel Generator reliability or availability. The Diesel Generators remain capable of performing their intended safety function as required to mitigate the consequences of the affected accidents.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because the changes to EWCS and the work implemented do not have an adverse impact on the reliability of the Diesel Generators, nor do they impact the reliability of any interfacing system. The changes do not introduce any new operational limitations for the affected engine subsystems, nor do they challenge the availability of the Diesel Generators. The changes do not impact Diesel Generator performance in any way. There is no interaction between these changes to the description of the Diesel Generators and any other equipment important to safety.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because this activity does not affect any parameters upon which the Technical Specifications are based.

ENGINEERING REQUEST

ER9901916

DESCRIPTION

The purpose of this Engineering Request was to install a freeze seal on the discharge side of relief valve 1CC9422A on line #1CC04EA-2" to repair/replace the valve.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because the installation of the freeze seal on this Component Cooling Water (CC) piping does not change any initiating condition or impact any accidents and transients evaluated in the UFSAR since the Unit 1 "A" train of Residual Heat Removal (RH) will be out-of-service (OOS) and appropriate Limiting Conditions for Operations will be entered. The added weight of the freeze seal has been evaluated along with flooding concerns and found acceptable. The CC system is not normally a radiological system but could possibly become contaminated from a RH Heat Exchanger tube rupture. Any leakage from a failed freeze would be contained in the Auxiliary Building and no increase in offsite dose would occur.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because the temporary freeze seal installation does not impact any other plant equipment that could initiate or create an accident different from those evaluated in the UFSAR. The freeze seal does not affect required plant equipment since the overpressure protection function of the relief valve is not required with the 1A RH Heat Exchanger isolated and OOS.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because all Technical Specification requirements were met.

DESIGN CHANGE

D20-1-99-370-001/002
D20-2-99-371-001/002

DESCRIPTION

The purpose of these Design Changes was to modify the mechanical seal cooling water configuration for the Steam Generator Blowdown Condenser Hotwell Pumps (1/2SD02PA/B) to permit the use of a single seal, cartridge type mechanical seal provided by John Crane. The existing mechanical seal (double seal) is provided with both a supply and return of cooling water via lines from the pump discharge and pump suction. The new mechanical seal only requires a supply of cooling water from the pump discharge. The cooling line from the pump discharge will be routed to the mechanical seal and a flexible hose will be installed to accommodate pump vibration. The cooling line from the pump suction will be cut and capped since it will no longer be required and the connection at the pump stuffing box will be plugged.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because the occurrence of Steam Generator tube leakage is governed by factors such as method of fabrication, metallurgy, chemistry, etc. The operation or non-operation of the Steam Generator Blowdown System and the Steam Generator Blowdown Condenser Hotwell Pumps has no effect on the probability of occurrence of tube leakage. The off-site dose resulting from steam generator tube leakage is a function of the radioactivity vented to the atmosphere via the Off-Gas System and that released from the liquid radwaste systems. The changes introduced to the Steam Generator Blowdown Condenser Hotwell Pump mechanical seal cooling systems do not introduce new leak paths to the atmosphere or sources of radioactivity. Therefore, the proposed changes do not increase the consequences of steam generator tube leakage.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because the proposed changes improve the materiel condition and maintainability of the Steam Generator Blowdown Condenser Hotwell Pumps without changing pump performance or function. No failure mechanisms or new operational modes are created by these changes which could impact equipment or interfacing systems in such a way as to create an accident or transient of a different type than those previously evaluated. Design considerations have been addressed to ensure that the proposed changes satisfy their intended purpose without impacting the performance of any other interfacing component or system.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because this activity does not affect any parameters upon which the Technical Specifications are based.

NUCLEAR WORK REQUEST (NWR)

990050987-01

DESCRIPTION

The purpose of this Nuclear Work Request was to perform a freeze seal on the 2B Containment Spray (CS) Pump cubicle cooler supply header to isolate valve 2SX2082D for repairs. To perform this work, Doors D-246 and D-844 had to be propped open to allow routing of hoses. These doors are ventilation barriers.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because propping open of the doors does not have any impact on the events which initiate a Loss of Coolant Accident (LOCA) or has no impact on system piping to cause flooding accident. Propping open of doors with the administrative controls in place to maintain differential pressure requirements ensures any design base accident remains bounded by the existing off-site dose boundary analysis calculation.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because the affected structure provides a ventilation boundary for Auxiliary Building Ventilation (VA) Systems. Part of the design requirements for the VA System is to limit environmental conditions in various zones in conformance with requirements. The High Energy Line Break (HELB) analysis was reviewed for environmental impact in the CS rooms and was determined to be not applicable. Also, the system controls radioactivity in the areas served by staging the supply air from the clean areas to the areas of greater potential contamination. Propping open of the doors could affect the differential pressure requirements within certain ECCS rooms, thus affecting Technical Specification requirements. Therefore, administrative controls will be established prior to and while the subject doors are open. The administrative controls consists of adjusting pressure control damper 0VA600Y until the Auxiliary Building accessible area achieves at least negative 0.3 inches water gauge pressure with respect to outside atmosphere. This will ensure all normal and accident mitigation functions of VA System are met.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because all Technical Specification and differential pressure requirements were met.

TECHNICAL SPECIFICATION BASES CHANGE

28-99 (B3.4.15)

DESCRIPTION

The purpose of this Technical Specification Bases Change was to remove paragraphs 5 and 6 from Section B3.4.15. Paragraphs 5 and 6 of Section B3.4.15 describe how installed dew point indicators can be used to monitor humidity levels inside containment atmosphere as an indicator of potential RCS leakage, although, the dew point indicators are not required. The subject dew point indicators were removed under exempt changes E20-1-97-265 and E20-2-97-265.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because the containment dew point temperature indicators to not influence any event responsible for the accidents reviewed and provide no controlling or protective functions, only indication. No fission product barriers are removed or degraded by this change. The ability of containment cooling system to remove energy released following a postulated loss-of coolant accident is not affected. The dew point temperature is not responsible for the automatic or manual actuation of the containment cooling system. The containment environmental conditions during normal and accident conditions is not impacted by this change. The ability to monitor containment atmospheric temperature required by Technical Specifications is not impacted. The operation and functions of the required reactor coolant pressure boundary leakage detection instruments are not impacted by this change. Several diverse forms of indication of leakage remain available.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because the affected dew point temperature indicators are not considered equipment important to safety nor do they support the operations of equipment important to safety. The indicators are not responsible for the automatic actuation or manual feature of any system. They are not necessary for containment cooling or leakage detection. Structural loading due to removal of the dew cells and replacement of indicators in the Main Control Room was reviewed and found acceptable.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because this activity does not affect any parameters upon which the Technical Specifications are based.

ENGINEERING REQUEST

9901490

DESCRIPTION

The purpose of this Engineering Request was to install a temporary freeze seal on the lines upstream and downstream of orifice flange 1FE-428, to replace the orifice flange gasket. This orifice is part of the Reactor Coolant System (RCS).

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because these lines is not used on modes 5, 6, or defueled. The additional weight of the freeze seal assembly has been evaluated, and any leakage or radiation release from a failed freeze seal would be bounded by the large break Loss of Coolant (LOCA) analysis. The Loop Stop Isolation Valves (LSIVs) will be closed and the RCS will be depressurized.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because the only accident or malfunction is a failed freeze, which is bounded by a large break LOCA (previously analyzed).

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because this activity does not affect any parameters upon which the Technical Specifications are based.

ENGINEERING REQUEST

ER9902088

DESCRIPTION

The purpose of this Engineering Request was to install a freeze seal on the discharge side of relief valve 1CC9422B on line 1CC04EB-2" to perform maintenance/replace the valve.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because the installation of the freeze seal on this Component Cooling Water (CC) piping does not change any initiating condition or impact any accidents and transients evaluated in the UFSAR since the Unit 1 "B" train of Residual Heat Removal (RH) will be out-of-service (OOS) and appropriate LCOs will be entered. The added weight of the freeze seal has been evaluated along with flooding concerns and found acceptable. The CC system is not normally a radiological system but could possibly become contaminated from a RH Heat Exchanger tube rupture. Any leakage from a failed freeze would be contained in the Auxiliary Building and no increase in offsite dose would occur.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because the temporary freeze seal installation does not impact any other plant equipment that could initiate or create an accident different from those evaluated in the UFSAR. The freeze seal does not affect required plant equipment since the overpressure protection function of the relieve valve is not required with the 1B RH Heat Exchanger isolated and OOS.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because all Technical Specification requirements were met.

DESIGN CHANGES

D20-0-99-315-001
D20-0-99-315-002
D20-0-99-315-003

DESCRIPTION

The purpose of these Design Changes was to remove the velocity sensing tubes and the airflow straighteners associated with unused/non-operational flow elements 0FE-VA013, 0FE-VA014 and 0FE-VA021 in the Auxiliary Building Ventilation System (VA). The modification process, in some cases, involves removing one side panel of the duct section containing air monitors, in order to proceed with the removal. The integrity of the duct was restored fully upon the removal of the airflow straightener and velocity tubes. Additionally all the holes left behind due to removal of tubes and airflow straightener were sealed to prevent air leaks.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because the portions of the VA System affected by the proposed changes does not initiate or alter the initial conditions of any accident or transient. The accident mitigation function of the VA (Non-Accessible and FHB) System is unchanged by the removal of the flow straighteners, therefore the consequences of an accident will not be increased by the implementation of the proposed changes.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because the portions of the VA System affected by the proposed changes are unrelated to the sequence of events leading to the initiation of an accident. Since the system's accident mitigation and normal functions were maintained, the possibility of an accident or malfunction of a different type from those evaluated in the SAR is not created.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because this activity does not affect any parameters upon which the Technical Specifications are based.

DOCUMENT CHANGE REQUEST

990352

DESCRIPTION

The purpose of this Document Change Request was to add check valve 0WM678 to drawing M-49 sheet 2. This valve was part of equipment designated for removal under Design Change E20-0-97-700-01. This valve however was not physically removed and is still needed.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because check valve 0WM678 is located upstream of a capped line and a branch line with a normally closed isolation valve. Thus this valve does not have any impact on the operation of the Demineralized Water (WM) System. Additionally, the affected components are not required for accident mitigation.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because a complete failure of the affected equipment would not result in an accident or any type malfunction.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because this activity does not affect any parameters upon which the Technical Specifications are based.

PROCEDURE REVISION

BwOP RH-6

DESCRIPTION

The purpose of this Procedure Revision was to add Attachments A and B which will place a Residual Heat Removal (RH) train in operation through the opposite train's cold leg discharge lines with its associated cold leg injection discharge MOV isolated (SI8809A & B).

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because components will operate in a manner consistent with the current practice, administrative controls will be implemented to prevent a spurious valve operation from creating a common mode failure, and usage will be restricted to periods when Reactor Coolant System pressure is < 100 psig.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because in mode 5 and 6 there are 3 transient/accidents of consideration: 1) loss of decay heat removal, 2) loss of Shutdown Margin, and 3) fuel handling/heavy load accident. Items 2 and 3 are not affected by the proposed activity because from the perspective of these transients the proposed activity does not differ from the current method of RH operation which is not a credible initiator of the transient/accident. UFSAR section 5.4.7.1 and tables 5.4-17 and 5.4-18 address the spectrum of subsets to item 1. The entire scope of mode 5 and 6 accidents/transients are encompassed by items 1, 2 and 3. No other accident or transient is credible.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because this activity does not affect any parameters upon which the Technical Specifications are based.

TECHNICAL SPECIFICATION BASES REVISION

B 3.9.4

DESCRIPTION

The purpose of this Technical Specification Bases Revision was to revise the Bases associated with Limiting Condition for Operation (LCO) 3.9.4, "Containment Penetrations," to allow for preparation of fuel movements during the required decay time of 100 hours. The Bases currently states: "The requirements of LCO 3.9.7, 'Refueling Cavity Water,' and the minimum decay time of 100 hours prior to Core Alterations ensure that the release of fission product radioactivity subsequent to the fuel handling accident in containment, results in doses that are will within the guideline values specified in 10 CFR 100". The reference to minimum decay time is being revised from "100 hours prior to Core Alterations" to "100 hours prior to the movement of irradiated fuel assemblies within the reactor vessel".

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because the cause of the Fuel Handling Accident inside containment is any event that would result in the dropping of a fuel assembly onto the reactor during refueling. Revising the Bases will have no impact on the initiation of the event. The equipment and fuel will be handled with all the same procedures, requirements, and safety features as before and within design. As such, no new failure modes are introduced and equipment malfunction is unaffected. The accident analyses as described in the UFSAR (15.7.4.2.1 and 15.4.7.4.2) remain valid in that the input assumptions are unaffected and, consequently, the conclusions related to radiological consequences are not impacted.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because revising the Bases to allow certain activities to occur in preparation for fuel movement during the required decay time does not involve a physical alteration of the plant. No new equipment is being introduced, and installed SSCs are not being operated in a new or different manner. The timing of certain refueling activities is affected but remain consistent with accident analysis input assumptions.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because the proposed change does not impact any accident analysis input assumptions. Therefore, the existing accident analyses remain applicable and the margin of safety is not reduced.

DESIGN CHANGE

D20-1-99-348
D20-2-99-348

DESCRIPTION

As a result of the review conducted in accordance with NRC Generic Letter 95-07, Pressure Locking and Thermal Binding of Safety Related Gate Valves, the 1(2)CV8804A valves were determined to be susceptible to pressure and thermally induced pressure locking. Valves 1(2)CV8804A are potentially susceptible to pressure and thermally induced pressure locking during mode 4 while shutdown cooling is being run and potentially remain pressure locked following entry into mode 3, then the valves would be required to be operable. The purpose of this Design Change was to prevent the pressure locking of these valves.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because the design change is being installed to eliminate pressure-locking concerns with the 1(2)CV8804A valve and improve reliability. The hole in the valve disc will enable venting of the trapped high-pressure fluid in the 1(2)CV8804A valve bonnets to further ensure the valves will open on demand. Gate valves are designed to normally seal on the downstream or non high-pressure side of the disc only. With the hold drilled in the upstream side of the disc the valve operation is not affected. Therefore, the design change will not increase the probability of occurrence of a malfunction of equipment important to safety.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because the design change will not create the possibility of a different type of malfunction of equipment than any previously evaluated. The function of the valve is not being changed and the ability of the valve to perform its intended function is not adversely affected.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because this activity does not affect any parameter upon which the Technical Specifications are based.

DESIGN CHANGE

D20-0-99-375-001
D20-0-99-375-002

DESCRIPTION

The purpose of these Design Changes was to modify systems at the River Screen House (RSH). Design Change 001 re-routed the supply piping for the RSH Screen Wash Booster Pumps. An existing portion of the Fire Protection (FP) ring header is used to supply the booster pumps. Design Change 002 removed the remaining unused portion of the FP ring header. All associated control, indication and alarm functions for FP ring header low pressure were removed.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because the changes implemented do not introduce any mechanisms that could initiate a fire at the RSH, nor do they add to the fire loading of the affected zone. The proposed changes do not introduce any new equipment or functions that are necessary to support the safe shutdown of the plant. Although all hose station manual extinguishing capability is being removed under these changes, the existing hose stations are not relied upon to provide this function. Therefore, there will be no change in the consequences of a design basis fire in the affected zone.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because the proposed changes do not introduce any new material or equipment failure mechanisms or abnormal operational modes that could create an accident or transient of a different type than previously evaluated. The screen wash and Circulating Water Makeup Systems remain functionally the same. The FP ring header is removed, however, it is not relied upon to provide any manual extinguishing capability.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because this activity does not affect any parameters upon which the Technical Specifications are based.

DOCUMENT CHANGE REQUEST

980457

DESCRIPTION

The purpose of this Document Change Request was to revise drawing M-49, sheet 1A to show the position of valve 0WM931 as normally closed. The drawing revision was necessary to reflect the actual plant configuration. Valve 0WM931 serves as isolation for the WM hose drop station to the tool deconning area. The manipulation of valve 0WM931 is in support of maintenance activities and plant operations are not affected.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because changing the position of valve 0WM931 from open to closed does not degrade the condition of the valve or any other plant equipment. This activity does not have any impact on the probability of occurrence of any accident or transient. Closing valve 0WM931 isolates the Demineralized Water (WM) supply to the Tool Decon Area. Tool deconning is not a plant operations related activity. Plant equipment is not degraded.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because valve 0WM931 serves as isolation for the WM hose drop station to the Tool Decon Area. Changing the position of this valve to normally closed does not have any degrading impact on plant equipment. Actually, closing this valve will alleviate flooding concerns in the tool decon area. This activity is a documentation change only. Additionally, the manipulation of valve 0WM931 is in support of maintenance activities and plant operations are not affected. The required changes will make the documentation reflect the actual normal position of the valve.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because this activity does not affect any parameters upon which the Technical Specifications are based.

NUCLEAR WORK REQUEST (NWR)

990090988

DESCRIPTION

The purpose of this Nuclear Work Request was to perform repairs to valve 0PW060. Component isolation is provided by two freeze seals on line 0PW09A-3" to minimize the impact on the Primary Water (PW) System. To ventilate the nitrogen exhausted by the freeze seal for personnel protection, Door D-305 had to be propped open. This door is a ventilation boundary.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because this activity does not affect any accident/transient initiating conditions. The accident mitigation function of the Auxiliary Building Ventilation (VA) System is not adversely impacted with this door open.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because VA System is unrelated to the sequence of events leading to the initiation of an accident and the system's accident mitigation and normal functions will be maintained with door D-305 propped open. No new failure mechanisms or modes are created by propping door D-305 open.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because this activity does not affect any parameters upon which the Technical Specifications are based.

DOCUMENT CHANGE REQUEST

970239

DESCRIPTION

The purpose of this Document Change Request (DCR) was to revise drawings M-35, Sheet 3; M-2035, Sheet 9; M-120, Sheet 3; and M-2120, Sheet 9. The drawings were revised to indicate that the instrument sensing lines and isolation valves for instruments 1PT-MS0052, 1PT-MS0054, 1PT-MS0056 and 2PT-MS0054 and 2PT-MS0056 are ½". No functional or physical changes are implemented by this DCR. The as-installed size for the affected instruments sensing lines and associated isolation valves were changed which is consistent with Westinghouse drawing 4673D68 for these instruments taps. In addition, Electronic Work Control System (EWCS) data records were being revised for the affected components to reflect their actual size.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because the drawing and EWCS changes implemented under this DCR do not involve any actual physical or operational changes for the affected instrument lines. No accident/transient initiating conditions are altered by theses changes. The drawing and EWCS changes do no impact the operation of equipment necessary to mitigate the consequences of any accident/transient.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because the drawing and EWCS changes implemented under this DCR do not make any physical changes to plant equipment nor do they involve changes to system/equipment operating parameters. No new failure mechanisms or modes are created by these drawing and EWCS changes.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because this activity does not affect any parameters upon which the Technical Specifications are based.

ENGINEERING REQUEST

9901437

DESCRIPTION

The purpose of this Engineering Request was to install a freeze seal on the Essential Service Water (SX) supply line to the 1A Auxiliary Feedwater (AF) Pump oil cooler to isolate valve 1SX2103A for repairs. The freeze seal provides component isolation on the upstream side of valve 1SX2103A to permit repairs on this valve without impacting the SX supply to other safety related components.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because the use of freeze seals is common and proven industry practice for temporary piping system isolation. The freeze seal has the same effect on plant equipment as closing the SX isolation valve to the oil cooler during maintenance activities. The freeze seal activity does not change the initiating conditions for any accident or transient, nor does it impact the performance of equipment required to mitigate the consequences of any accident.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because no new failure mechanisms or modes and now new operating limitations or restrictions are created by the installation of the freeze seal.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because this activity does not affect any parameters upon which the Technical Spefications are based.

PROCEDURE REVISION

BwVS TRM 3.3.a.1

DESCRIPTION

The purpose of this Procedure Revision was to replace sections that were inadvertently deleted.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because the Movable Incore Detector System is not assumed in any accident analysis.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because the Movable Incore Detector System is used for monitoring core flux during operation. It does not perform any functions that could impact or mitigate an accident.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because this activity does not affect any parameters upon which the Technical Specifications are based.

UFSAR REVISION

UFSAR Draft Revision Package 8-047

DESCRIPTION

The purpose of this UFSAR Revision was to revise the Braidwood/Byron common setpoints of 111 psig for Waste Gas Compressor high discharge pressure alarm and 110 psig for Waste Gas Compressor high discharge pressure trip, to separate Braidwood setpoints of 100 psig for compressor high discharge pressure and 100 psig for compressor high discharge pressure trip.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because the Waste Gas Compressors are not important to safety or used to mitigate any accident or transient and are not used to support any plant equipment that is important to safety to perform safety functions. The Waste Gas Compressors are used to fill the Gas Decay Tanks (GDTs) however this activity cannot result in overpressurizing a GDT. Also, since there is no transient associated with a complete rupture of a GDT, the probability of this occurrence as a Condition III fault is not affected by this activity. The radioactive content of the gas inventory in the GDTs are a function of reactor full power days and percent failed fuel in the Reactor Coolant System. This activity does not affect either the gas inventory or pressure in a GTD. The consequences of a complete rupture of a GDT is, therefore, not affected.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because the radiological consequences of a Waste Gas Compressor accident or transient are bounded by the previously evaluated accident of a postulated GDT rupture. This activity does not create the possibility for more than one GDT to rupture.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because this activity does not affect any parameters upon which the Technical Specifications are based.

NUCLEAR WORK REQUEST (NWR)

990125310-01

DESCRIPTION

The purpose of this Nuclear Work Request was to remove the floor plug access to the Spent Fuel Pit Demineralizer Vault to investigate the source of leakage. This floor plug is a ventilation boundary.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because the Auxiliary Building Ventilation System is unrelated to the sequence of events leading to the initiation of any accident. Auxiliary Building Ventilation System airflows are not impacted in such a manner as to increase the release of airborne activity. The affected vaults/cubicles will remain under negative pressure with respect to the general area of the Auxiliary Building.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because no new failure modes or radiological concerns are created by removing the floor plug since there will be no adverse impact on the operations of the Auxiliary Building Ventilation System.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because this activity does not affect any parameters upon which the Technical Specifications are based.

DESIGN CHANGE

D20-1-98-336

DESCRIPTION

The purpose of this Design Change was to replace the existing Kerotest vent valves 1RC8029A/B/C/D (Y-globe valve type) with Anchor Darling globe valves. Also, tieback supports 1RC01009T, 1RC02009T, 1RC03009T, and 1RC04009T will be added to support vent lines 1RC23AA, 1RC23AB, 1RC23AC, and 1RC23AD respectively.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because the subject design change replaces valves that are prone to leakage with more reliable valves of more suitable design, and install one tieback support for each vent line. The bounding condition analyzed for a Small Break Loss of Coolant Accident (SBLOCA) is for a 3 inch line, which bounds the affected components and their associated piping. The replacement valves perform the same function, in the same manner, and have the same modes of failure as the existing valves. Installing the tieback supports reduces the stresses in the affected piping, and consequently reduces the potential of its failure compared to current configuration. The affected valves and supports will not become more interacted with any Structure, System or Component that is important to safety, and are not expected to function to mitigate the consequences of any accident. Therefore, the subject design change will not increase the probability of occurrence or the consequences of an accident or a malfunction of equipment important to safety.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because pipe stresses have been reviewed and found to be acceptable. The affected components are not automatically actuated to mitigate a certain transient, and the SBLOCA is the only conceivable accident that can be caused by the affected components. Therefore, this design change does not create the possibility of an accident or a transient of a different type than previously evaluated.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because this activity does not affect any parameters upon which the Technical Specifications are based.

UFSAR REVISION

UFSAR Draft Revision Package 8-073

DESCRIPTION

The purpose of this UFSAR Revision was to implement the following changes related to the commitments to Regulatory Guide 1.137 contained in Appendix A of the UFSAR:

- Distinguish between the criteria established at Byron and Braidwood Station used to procure and replace components originally designed and constructed to ASME Section III, Subsection ND.
- State that Diesel Oil (DO) System pressure testing will be performed to the committed edition/addenda of ASME Section XI and applicable code cases.
- Provide additional references related to the sampling of new and stored fuel oil.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because the proposed activity does not change any initiating conditions or events associated with any accident or transient, nor do they change the normal operation of the Diesel Generators (DGs) or DO System. The changes implemented under DRP 8-073 do not adversely affect DG or DO System reliability or availability. The Diesel Generators remain capable of performing their intended safety function as required to mitigate the consequences of the affected accidents and the DO System remains capable of supporting this function.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because the changes to the UFSAR implemented under this activity do not have an adverse impact on the reliability of the Diesel Generators, nor do they impact the reliability of any interfacing system or supporting system. The changes do not introduce any new operational limitations for the affected engine subsystem, nor do they challenge the availability of the Diesel Generators.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because this activity does not affect any parameters upon which the Technical Specifications are based.

NUCLEAR WORK REQUEST (NWR)

99066727

DESCRIPTION

The purpose of this Nuclear Work Request was to support maintenance activities involving the Unit 2 containment chiller disassembly. To support this work, Door D-306 had to be propped open to allow routing of hoses. This door is a ventilation boundary.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because the accident mitigation function and normal functions of the Auxiliary Building Ventilation (VA) System will still continue to maintain the building at a negative pressure, control post accident radioactivity leaking from the ECCS equipment within required limits, and maintain environmental qualification zone requirements for the affected areas.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because the Auxiliary Building Ventilation System and door D-306 is unrelated to the sequence of events leading to the initiation of an accident. Since the system's accident mitigation and normal functions will be maintained, the possibility an accident or malfunction of a different type from those evaluated in the SAR is not created.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because this activity does not affect any parameter upon which the Technical Specifications are based.

UFSAR REVISION

UFSAR Draft Revision Package 8-074

DESCRIPTION

The purpose of this UFSAR Revision was to add additional information to Sections 10.4 and 7.3 regarding the automatic starting of the Auxiliary Feedwater (AF) pumps without prelubrication. Currently, Section 7.3 states that the AF Pumps can be started with an ESF signal without prelubrication and that the bearings will not experience damage due to retention of an oil film on the bearings provided that the pumps are started at least monthly. The changes are to revise Section 7.3 to state that either the AF Pumps or their auxiliary oil pumps can be run monthly to maintain the oil film and to add this revised information to Section 10.4. Currently Section 10.4, which discusses the AF System, does not make mention of the requirement to run the AF Pumps or their auxiliary oil pumps monthly to maintain an oil film on the bearings.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because this change is passive and will not challenge any of the equipment whose failure (Main Feedwater piping, Main Steam piping, Steam Generator tubes, Reactor Coolant piping, etc.) or malfunction (Main Feedwater Pump) could result in an accident requiring AF actuation. The practice of running either the AF Pumps or their auxiliary oil pumps every month to maintain the required oil film on the pump bearings has been authorized by the pump manufacturer.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because the proposed revision only impacts the AF Pumps. No other components within the AF System or other systems are impacted. The AF Pumps will be maintained and operated in accordance with the manufacturer's recommendations. The design of the AF Pump starting circuit, which includes the lube oil permissive bypass upon ESF actuation, remains unchanged. The bearing oil film which allows for an ESF auto start without bearing damage will be maintained on the AF Pump sleeve bearings. The option of running just the auxiliary oil pumps each month reduces the frequency at which AF System components are manipulated and thus the potential for operational errors and wear related equipment failures. The AF System design accommodates a complete loss of one train and this remains unchanged.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because this activity does not affect any parameters upon which the Technical Specifications are based.

TECHNICAL SPECIFICATION BASES REVISION

B 3.7.1

DESCRIPTION

The purpose of this Technical Specification Bases Revision was to revise the Bases associated with Surveillance Requirement (SR) 3.7.1.1. to more specifically define the method of testing Main Steam Safety Valves (MSSVs). This change is consistent with NUREG-1431, "Standard Technical Specification conversion. Braidwood Station was not committed to using ANSI/ASME OM-1-1987. Consequently, Braidwood deviated from NUREG-1431 during Improved Technical Specification implementation. Subsequently, Braidwood has committed to use of this standard.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because the proposed change merely adds more specific information regarding the current Station practice for testing MSSVs and is consistent with the level of detail provided in NUREG-1431. The function of the MSSVs is not affected by the proposed wording change. Equipment failures and malfunctions are not affected by the proposed wording change since the function of the MSSVs is not affected. The accident analyses as described in the UFSAR remain valid in that the input assumptions are unaffected.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created since the function of the MSSVs is not affected by the proposed wording change, the possibility of an accident or transient of a different type is not created.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because this activity does not affect any parameters upon which the Technical Specifications are based.

NUCLEAR WORK REQUEST (NWR)

99091503

DESCRIPTION

The purpose of this Nuclear Work Request was to support maintenance activities involving the Blowdown Demineralizer Tank (0WX01DA). To support this work, a floor plug had to be removed to allow routing of hoses and equipment. This floor plug is part of a ventilation boundary.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because the new flowpath has been evaluated and determined that the flowpath is acceptable and will maintain the Auxiliary Building within acceptable limits. Thus no malfunction of equipment important to safety exists. There is no increase in the consequences of an equipment malfunction since no new assumptions are being made with regard to the reliance on equipment or equipment performance.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because the reductions of airflow to the affected rooms does not create any new failure mechanisms which are not already bounded by the UFSAR. All Auxiliary Building Ventilation (VA) System safety related design requirements will still be met. Thus the proposed activity has minimal effects on VA.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because this activity does not affect any parameters upon which the Technical Specifications are based.

DOCUMENT CHANGE REQUEST

970093

DESCRIPTION

The purpose of this Document Change Request was to revise drawings M-48-53 and PG-2557A-886 to add Equipment Piece Number (EPN) 0WX425A and 0WX470A to valves labeled No EPN.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because this change does not affect any SSC that is important to safety. This is an administrative change to have the drawings reflect actual plant conditions.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because the "as built" filed configuration is not being changed by this activity. This is an administrative change to have the drawings reflect actual plant conditions.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because this activity does not affect any parameters upon which the Technical Specifications are based.

TECHNICAL REQUIREMENTS MANUAL

Revision 6

DESCRIPTION

The purpose of this Technical Requirements Manual (TRM) Revision was to eliminate Mode 6 from the Applicability of TRM Limiting Conditions for Operation (TLCOs): 3.1.a "Boration Flow Path – Shutdown", 3.1.c "Charging Pump – Shutdown", and 3.1.e "Borated Water Source – Shutdown". This change also eliminates the associated Action requirements that are Mode 6 unique; i.e., suspend core alterations.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because an uncontrolled boron dilution accident is not credible in Mode 6 with the implementation of controls pursuant to Technical Specification (TS) 3.9.2, "Unborated Water Source Isolation Valves," as discussed in UFSAR section 15.4.6.3. Furthermore, the boration capability is being transferred from the TRM to the Safe Shutdown Management Program (SSMP). The affected components are mitigation components, not involved in event initiation. Therefore, the probability of occurrence remains unaltered as a result of the proposed activity. Since the transient is precluded both prior to and after implementation of the proposed activity, the consequences of an uncontrolled boron dilution accident remain unaltered.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because the change is essentially a change in boration capability function control form the TRM to the SSMP in Mode 6. As a result, all components will be operated in a manner consistent with current practice. For compliance with TS 3.4.12, "Low Temperature Overpressure Protection (LTOP)", using an Safety Injection (SI) Pump for the boration capability function will be restricted to those times when the reactor head is removed. All pumps and flow paths, both Chemical and Volume Control and SI, employed for the boration capability function are routinely surveillanced with the plant in this configuration pursuant to various Technical Specification and Inservice Inspection surveillance requirements. Since all components will be operated in a manner consistent with current practice, the existing safety evaluations remain valid and continue to envelope the spectrum of possible accidents and transients.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because this activity does not affect any parameters upon which the Technical Specifications are based.

UFSAR REVISION

UFSAR Draft Revision Package 8-032

DESCRIPTION

The purpose of this UFSAR Revision was to remove a specific value for the Rod Off Top alarm and references cycle-specific data. This change supports multiple full-out park positions for the control rods (which minimizes wear to the control rods) while supporting dark board conditions in the Main Control Room.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because the alarm setpoint is a passive alarm, and provides no control functions. The alarm will still function as intended and alarm when a rod is not fully withdrawn.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because the alarm setpoint does not interact with any other systems. There is not change to the alarm itself, and no new operating regimes are created. No other malfunctions or failures will occur due to this change. Even if Digital Rod Position Indication shifts to "half-accuracy", there are sufficient coils on the detector to provide rod location data and allow the alarm to annunciate, retaining the alarm function.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because this activity does not affect any parameters upon which the Technical Specifications are based.

UFSAR REVISION

UFSAR Draft Revision Package 8-071

DESCRIPTION

The purpose of this UFSAR Revision was to revise Sections 5.4.10.2.2, 5.4.10.3.4 and 6.2.5.3.1.2 to reflect that the plant can be operated as designed with the Pressurizer Spray manual bypass valves (RY8050 and RY8051) closed. The UFSAR previously stated that there is a manual throttle valve in parallel with each spay valve that permits a continuous flow through both spray lines to reduce thermal stresses and thermal shock when the spray valves (RY455B and RY455C) open, and to help maintain uniform water chemistry and temperature in the Pressurizer. Temperature sensors with low alarms are provided in each spray line to alert the operator to insufficient bypass flow.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because the design of the spray valves allows internal leakage past the closed valves, providing the continuous flow necessary to maintain uniform water chemistry and proper spray line temperature, reducing thermal stresses and thermal shock associated with opening the spray valves. Closing the manual bypass valves does not challenge any fission barriers. The Pressurizer remains fully capable of maintaining Reactor Coolant System pressure.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because the system continues to perform as intended. Leakage past the spray valves performs the same function the throttled bypass valves were intended to perform. Temperature sensors remain in place to alert the operator to insufficient flow in the spray lines while the spray valves are closed.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because this activity does not affect any parameters upon which the Technical Specifications are based.

MODIFICATION TEST

D20-1-98-229-1

DESCRIPTION

The purpose of this Modification Test was to modify the 1B Auxiliary Feedwater (AF) Pump starting circuit. The modification consisted of removing the main control switch STP contact from the pump's auto start circuit. The specific switch Equipment Piece Number is 1HS-AF002. The STP contact is closed only when the control switch is in either the Pull-To-Lock, Trip or After Trip positions. The contact is open when the control switch is in either the Close or After Close position. The effect of the change is to remove an interlock from the pump auto-start circuit such that the pump can auto start for any of the as-left manipulated positions of the control switch except Pull-To-Lock.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because in Modes 5, 6 or Defueled, when the modification test will be performed, there is no consequences to any of the accidents which require Auxiliary Feedwater (AF) to mitigate except for the "Loss of Nonemergency AC Power to the Plant Auxiliaries", "Steam Generator Tube Rupture" and "Loss of Coolant Accidents Resulting From a Spectrum of Postulated Piping Breaks Within the Reactor Coolant Pressure Boundary". For these 3 accidents, the AF system would not be used for mitigation. The Loss of Coolant Accident and Steam Generator Tube Rupture would be addressed using the ECCS Systems. The loss of Nonemergency AC Power would be dealt with using features of the Auxiliary Power System. Therefore, having the 1B AF pump unavailable consequences of these accidents should they occur.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because the 1B AF Pump will not run and there will be no impact outside of the 1B Train of AF. They jumper installed to simulate an ESF signal will be across the output contacts for the relay initiating an auto start of the 1B AF pump on a low-2 Steam Generator level. No other equipment will be actuated. The jumper used will be a switch type jumper and it will be installed and removed with the switch in the Open position to prevent unwanted equipment actuations.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because this activity does not affect any parameters upon which the Technical Specifications are based.

NUCLEAR WORK REQUEST (NWR)

990091505

DESCRIPTION

The purpose of this Nuclear Work Request was to support maintenance activities involving the blowdown demineralizer tank, 0WX01DB. To support this work, a floor plug had to be removed to allow routing hoses and equipment. This floor plug is a ventilation boundary.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because the new flowpath has been evaluated and determined that the flowpath is acceptable and will maintain the Auxiliary Building within acceptable limits. Thus no malfunction of equipment important to safety exists. There is no increase in the consequences of an equipment malfunction since no new assumptions are being made with regard to the reliance on equipment or equipment performance.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because the reduction of airflow to the affected rooms does not create any new failure mechanisms which are not already bounded by the UFSAR. All Auxiliary Building Ventilation (VA) System safety related design requirements will still be met. Thus the proposed activity has minimal effects on VA.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because this activity does not affect any parameters upon which the Technical Specifications are based.

SPECIAL PROCESS PROCEDURE

SPP 00-001

DESCRIPTION

The purpose of this Special Process Procedure was to pressurize portions of the Safety Injection (SI) System to their required pressure for ASME Section XI visual exams to allow the required VT-2 exams to take place. The test set up conditions for the required post-maintenance visual exams on SI check valves to be placed during A1R08.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because pressurizing portions of the Safety Injection System to approximately 1800-2230 psig (below their design pressure) will not have any affect on the probability of any of the accidents. This procedure cannot affect secondary system initiated accidents. The hydro test rig will have a relief valve to prevent over pressurization of any of the lines, so there will be no effect on the reactor coolant pressure boundary valves. With Reactor Coolant System (RCS) pressure being maintained greater than hydro pump pressure, no water will be added to the RCS. Any water that is added to allow the pressurization will be 2300-2500 ppm boron, which is consistent with RWST boron concentration. Performance of this procedure will have no affect on the Safety Injection system's ability to perform its intended function. Any accident that requires the Safety Injection Pumps to inject water into the RCS will, by definition, have reduced RCS pressure below that in the pressurized sections of pipe. The ECCS will remain capable of performing its design function throughout performance of this test.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because the proposed activity will involve inspecting piping that could normally and is designed to be at RCS normal operating pressure. The vent valve will have a 3/8" reducer and the hydro pump attached downstream of it. The reducer will limit any leakage out of this path to that within the capacity of a Centrifugal Charging Pump in the event of reactor coolant pressure boundary isolation valve leakage during the test. In addition, the inboard containment isolation valve (1SI8871) can be closed to isolate any leakage coming from inside containment.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because this activity does not affect any parameters upon which the Technical Specifications are based.

PROCEDURE REVISION

ER-BR-540-001

DESCRIPTION

The purpose of this Procedure Revision was to verify the 1B Auxiliary Feedwater (AF) Pump performance was within the minimum and maximum pump performance curves assumed in the accident analysis, and that the fail open throttle setting of the air operated AF flow control valves satisfied the flow requirements associated with the Feedwater Line Break (establishes minimum flow requirement) and Steam Generator Tube Rupture (establishes the maximum flow requirement) accident analyses. The test was performed with the Unit in Mode 5 or de-fueled.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because in Mode 5 or de-fueled conditions, when the test procedure will be performed, there are no consequences to any of the accidents requiring the AF System except the "Loss of Nonemergency AC Power to the Plant Auxiliaries," "Steam Generator Tube Rupture (SGTR)", and "Loss of Coolant Accidents (LOCA) resulting from a spectrum of postulated piping breaks with the reactor coolant pressure boundary." For these 3 accidents, the AF System would not be used for mitigation. The LOCA and SGTR would be addressed using the ECCS systems. The Loss of Non-emergency AC Power would be dealt with using features of the Auxiliary Power System. Therefore, having the AF System in an abnormal configuration for testing purposes would not increase the consequences of these accidents should they occur.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because the test procedure will flow water to the Steam Generators from the AF System during Mode 5 or de-fueled conditions. The secondary side of the Steam Generators will be protected as follows: 1) Steam Generator pressure and temperature limitations will be followed as described in TRM 3.7.a, 2) Chemistry will be notified prior to adding water to the Steam Generators to ensure any secondary side water chemistry issues or concerns are addressed, and 3) the test will be stopped if any Steam Generator wide range level reaches 95% to prevent putting water into the Main Steam lines. The reactivity change to the primary side of the plant associated with adding cold water to the secondary side of the Steam Generators while in the prescribed plant conditions will not pose a challenge to the shutdown margin.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because this activity does not affect any parameters upon which the Technical Specifications are based.

UFSAR REVISION

UFSAR Draft Revision Package 8-075

DESCRIPTION

The purpose of this UFSAR Revision was to revise Tables 9.4-13 and 9.4-15 to provide an acceptable alternative filter media type to the existing equipment parameters and ASHRAE Standards specified. The vendor improved the performance of the DriPak series filters by changing to a synthetic fiber.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because the miscellaneous electric equipment room, ESF switchgear room, and Cable Spreading room are required to be maintained below 108°F. as required by the Technical Requirements Manual (TRM) and UFSAR design requirements. The ventilation systems provide a supporting function ensuring the equipment in these rooms are able to meet their intended safety functions assumed by the accident analysis transients. As stated earlier, the new prefilters will meet the design, material, and construction standards applicable to the Miscellaneous Electrical Equipment Room (MEER) Ventilation and Switchgear Heat Removal (VE and VX) UFSAR system design. Because the filters will function as before with negligible effects, the airflow and system HVAC requirements for both the miscellaneous electric rooms, ESF switchgear rooms, and cable spreading rooms will be maintained during both normal and abnormal operating conditions (except during a high energy line break) as before. Thus, the system's heat removal capabilities of each ventilation system will maintain each of the rooms below 108°F as required per the TRM and UFSAR requirements. Since there will be no equipment degradation during abnormal operating conditions, the potential for any increase in release in fission products during the listed transients cannot occur. Therefore the proposed activity will not increase the probability of occurrence or consequences of an accident or a malfunction of equipment.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because the new filters installed in the VE and VX systems cannot create the possibility of an accident or transient of a different type. The filters, by themselves, cannot directly affect the equipment in the MEER, ESF Switchgear, and Cable Spreading rooms. Indirectly, the filters could potentially impact the operation of the VE and VX Ventilation Systems, which provide a supporting temperature control function to these rooms. However, as previously stated, the new filters meet all safety related design requirements.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because this activity does not affect any parameters upon which the Technical Specifications are based.

NUCLEAR WORK REQUEST (NWR)

990047575

DESCRIPTION

The purpose of this Nuclear Work Request was to perform maintenance on the Unit 1 containment chiller. To support this work, Door D-305 had to be propped open to allow routing of hoses. This door is a ventilation barrier.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because the accident mitigation function and normal functions of the Auxiliary Building Ventilation (VA) System will still continue to maintain the building at a negative pressure, control post accident radioactivity leaking from the ECCS equipment within required limits, and maintain environmental qualification zone requirements for the affected areas.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because the Auxiliary Building Ventilation System and Door D-305 is unrelated to the sequence of events leading to the initiation of an accident. Since the system's accident mitigation and normal functions will be maintained, the possibility of an accident or malfunction of a different type from those evaluated in the SAR is not created.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because this activity does not affect any parameters upon which the Technical Specifications are based.

NUCLEAR WORK REQUEST (NWR)

9900115179

DESCRIPTION

The purpose of this Nuclear Work Request was to overhaul the 1B Essential Service Water (SX) Pump. To perform this work, a floor plug had to be removed to allow the routing of hoses and equipment. The floor plug is a ventilation barrier.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because the probability of creating an initiating event of Loss of Offsite Power, Loss of Coolant Accident (LOCA) or High Energy Line Break is not affected. Also, removing the floor plug will not affect any safety related equipment from a ventilation boundary perspective. The Auxiliary Building Ventilation (VA) System will still meet its intended functions, thus all other safety related equipment will not be affected from ventilation concerns. The airflow path essentially remains unchanged, thus VA will continue to function as before and the offsite dose analysis remains the bounding analysis.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because this action does not have an impact on the events which initiate a LOCA or a radioactive release accident.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because this activity does not affect any parameters upon which the Technical Specifications are based.

DESIGN CHANGE

D20-2-98-336

DESCRIPTION

The purpose of this Design Change was to replace the existing Kerotest vent valves 2RC8029A/B/C/D (Y-globe valve type) with Anchor Darling globe valves. Also, tieback supports were added to support vent lines 2RC23AA, 2RC23AB, 2RC23AC, and 2RC23AD respectively.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because the subject design change replaces valves that are prone to leakage with more reliable valves of a more suitable design, and install one tieback support for each vent line. The bounding condition analyzed for a Small Break Loss of Coolant Accident (SBLOCA) is for a 3 inch line, which bounds the affected components and their associated piping. The replacement valves perform the same function, in the same manner, and have the same modes of failure as the existing valves. Installing the tieback supports reduces the stresses in the affected piping, and consequently reduces the potential of its failure compared to the current configuration. The affected valves and supports will not become more interacted with any SSC that is important to safety, and are not expected to function to mitigate the consequences of any accident. Therefore, the subject design change will not increase the probability of occurrence or the consequences of an accident, or a malfunction of equipment important to safety.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because pipe stresses have been reviewed and found to be acceptable. The affected components are not automatically actuated to mitigate a certain transient, and the SBLOCA is the only conceivable accident that can be caused by the affected components. Therefore, this design change does not create the possibility of an accident or a transient of a different type than previously evaluated.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because this activity does not affect any parameters upon which the Technical Specifications are based.

ENGINEERING REQUEST

9900362
9900368

DESCRIPTION

The purpose of these Engineering Requests was to install freeze seals on the Essential Service Water (SX) supply and return lines for the 2A Diesel Generator (DG) Jacket Water Coolers (2DG01KA-X1 & X2) to repair valves 2SX052A and 2SX057A.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because the freeze seal has the same affect on plant equipment as closing the SX isolation valves 2SX052A and 2SX057A to the 2A DG Jacket Water Coolers 2DG01KA-X1 and X2. The additional weight and flooding were evaluated and are not a concern, and there is no effect on overall required SX System flow. The SX System is also not a radiological barrier. The work will be performed with the 2A Diesel Generator Out-Of-Service. The 2B Diesel Generator was operable as required for the applicable mode(s). A failure of the freeze seal will not initiate or alter the initial conditions to any accidents or transients.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because the freeze seal has the same affect on the plant equipment as closing the SX isolation valves 2SX052A and 2SX057A to the 2A DG Jacket Water Coolers 2DG01KA-X1 and X2.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because the 2A Diesel Generator will be Out-of-Service and the 2B Diesel Generator will be operable as required for the applicable mode. All Technical Specification requirements were met.

ENGINEERING REQUEST

9900366
9900369

DESCRIPTION

The purpose of this Engineering Request was to install freeze seals on the Essential Service Water (SX) supply and return lines for the 2B Diesel Generator (DG) Jacket Water Coolers to repair valves 2SX052B and 2SX057B.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because the freeze seal has the same affect on plant equipment as closing the SX isolation valves 2SX052B and 2SX057B to the 2B DG Jacket Water Coolers 2DG01KB-X1 and the X2. The additional weight and flooding were evaluated and are not a concern, and there is no effect on overall required SX System flow. The SX System is also not a radiological barrier. The work will be performed with the 2B Diesel Generator Out-Of-Service. The 2A Diesel Generator was operable as required for the applicable mode(s). A failure of the freeze seal will not initiate or alter the initial conditions to any accidents or transients.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because the freeze seal has the same affect on the plant equipment as closing the SX isolation valves 2SX052B and 2SX057B to the 2B DG Jacket Water Coolers 2DG01KB-X1 and X2.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because the 2B Diesel Generator will be Out-Of-Service and the 2A Diesel Generator will be operable as required for the applicable mode. All Technical Specification requirements were met.

PROCEDURE REVISION

BwOR WEST-222

DESCRIPTION

The purpose of this Procedure Revision was to evaluate a Westinghouse supplied procedure revision (BwOR WEST-222). The procedure was used to provide detailed guidance for the Digital Rod Position Indication (DRPI) and Control Rod Drive Mechanism (CRDM) Cable and Connector Upgrade Modifications. These procedures describe the physical work activities and construction testing associated with DRPI cable and connector replacement and detector (coil stack) upgrades.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because neither of the SSCs affected are required to be operable during Modes 5 and 6 with the initial plant conditions of all rods fully inserted with no ability to move rods. The majority of the testing was performed deenergized and cannot cause an accident or transient. The partial DRPI System test performed while energized checks normal operation of portions of that system (with the exception of actual rod motion), thus no increase of probability is possible and the activities are bounded by existing accident or transient analysis.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because the procedures and tests described were performed on SSCs which are not required while the plant is in Modes 5 and 6 with all rods fully inserted and no rod motion capability. These procedures and tests provided no new or different malfunctions for equipment important to safety.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because this activity does not affect any parameters upon which Technical Specifications are based.

UFSAR REVISION

UFSAR Draft Revision Package 8-044

DESCRIPTION

The purpose of this UFSAR Revision was to revise Section 9.3.4.1.2.5 to clarify the component description of the Chemical And Volume Control (CV) System letdown orifices to reflect that one or more orifices are operated in parallel to establish the required letdwon flow rate to support all system operational requirements. Table 9.3-2 was also revised to indicate the range of normal operational letdown flows and the corresponding charging flow rates.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because no physical changes are being incorporated under this activity. The initiating conditions for any accident are not impacted by this activity. This activity has no impact on equipment necessary to mitigate the consequences of accidents or transients evaluated in the UFSAR.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because this activity does not incorporate any physical changes to the plant and now new failure mechanisms or modes are created by the implementation of this activity. Therefore, the changes to description of letdown orifice operation cannot create an accident or malfunction different from those evaluated in the UFSAR.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because this activity does not affect any parameters upon which the Technical Specifications are based.

PROCEDURE REVISION

RP-BR-460

DESCRIPTION

The purpose of this Procedure Revision was to control the installation and removal of floor drain covers on floor drains located within the U1/U2 Auxiliary Building Non-Borated Equipment Drain Sump Curved Wall Areas (CWA) on the 346 elevation of the Auxiliary Building. This activity has the affect of potentially raising flood levels in the subject CWAs and the 346 Auxiliary Building General Area during an Auxiliary Building flooding event.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because the probability of an Auxiliary Building flood occurrence is dependent upon a high or moderate energy line fault of piping systems within the subject compartments. The floor drains being covered has no affect on this probability. The consequences as a result of this accident are not increased because the activity cannot result in higher flood levels in either the Residual Heat Removal or Containment Spray Pump rooms, or adversely affect any safety-related equipment as a result of the accident.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because the conclusion reached in the previously evaluated Auxiliary Building flood analysis are still valid. No additional risk or failure modes are posed to safety related equipment and no new accident initiators are created as a result of this activity.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because this activity does not affect any parameters upon which the Technical Specifications are based.

Design Change

D20-1-98-328-002

DESCRIPTION

The purpose of this Design Change was to replace the existing obsolete Winding Hot Spot Temperature monitoring devices with new Qualitrol devices for System Aux Transfprmer (SAT) 142-2, as recommended by transformer manufacturer.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because the functioning of the transformer is not affected by the change. It will not function differently than before the change. Changed failure modes have not been introduced by the change.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because the changed devices are for monitoring only and do not affect the capability of the transformer to perform its function to provide power to components.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because this activity does not affect any parameters upon which the Technical Specifications are based.

DESIGN CHANGE

D20-0-99-364
D20-1-99-364
D20-2-99-364

DESCRIPTION

The purpose of these Design Changes was to modify the operation of the non-safety related Containment Refuel Machine and Spent Fuel Pool Bridge Crane (SFPBC) to allow a wider range of speeds for the bridges and trolleys of both, and the hoist of the SFPBC.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because the likelihood of a mechanical failure is not increased because the changes to increase the range of allowed speeds is within the design criteria of the equipment. The likelihood of an operator error is not increased because the number of fuel assembly manipulations is not changed; the equipment the operator is using is not changed; the interlocks on the equipment are not changed; and the same skills of the operator will be used to avoid/prevent errors.

   The consequences do not increase because these changes do not result in either an increase in the source term for radioactive release; an increase of the amount of fuel damaged; degradation of the radiation detection system; or degradation of the Fuel Handling Building ventilation for the Spent Fuel Pool. Since none of these are affected by these changes, the consequences of the accident are not affected.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because the changes only affect the speed of assembly movement and no other functions or safety features of the fuel handling equipment are affected. The equipment is designed to operate at the speeds specified in this change and therefore, will be operated within their design bases. As such, no new failure modes or malfunctions of the equipment are expected.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because this activity does not affect any parameters upon which the Technical Specifications are based.

DESIGN CHANGE

9900250
9900251

DESCRIPTION

The purpose of these Design Changes was to revise the trip logic for the loss of DC power trip associated with turbine Digital Electro-Hydraulic Computer (DEHC) to require a loss of power to both card frames. The change to the loss of DC power trip logic will prevent a single card failure from initiating a turbine trip. In addition, the logic for the Power Supply Monitor light on the Operators panel will be revised to provide indication of loss power to the card frames.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because the loss of power logic provides a turbine trip in response to loss of internal power in the DEHC. The change to the circuit does not affect the reliability of the DEHC power supplies, the DEHC or the turbine. The change eliminates single failure trip concerns associated with output relay circuit cards used in the trip logic. This change reduces the probability of an inadvertent turbine trip from failures in the loss of power circuitry. The change does not affect the response of the DEHC to an actual loss of internal power. The loss of power is not used for the other turbine protection functions and will not affect their operation.

   The loss of power trip is not used to control or mitigate the transient following a turbine trip for a DEHC loss of power or for the other turbine protection trips. The change to the logic will not prevent the reactor trip signal initiated following any turbine trip. Therefore, the response of the plant following any turbine trip as described in the UFSAR is not affected. The loss of power trip logic is not used in response to other turbine or DEHC failures and has no affect on the response of the plant or action required for such failures.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because the loss of power circuitry is not used for turbine control and does not affect operation of the turbine. The change to the logic does not alter the response of the DEHC to a loss of power and a turbine and reactor trip will occur as required. The loss of power logic is not used for other turbine protection, including overspeed, and will not prevent actuation of required protection functions. The logic is not used in any Reactor Protection System logic to initiate the reactor trip.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because this activity does not affect any parameters upon which the Technical Specifications are based.

NUCLEAR WORK REQUEST (NWR)

990080000-02

DESCRIPTION

The purpose of this Nuclear Work Request was to establish and maintain freeze seals on lines 1CV10CA-3" and 1RC28A-3" to support work on valve 1CV8379B.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because the addition of a freeze seal will not result in degradation of the operation of equipment required to mitigate the consequences of any accident. The freeze seals will be established and maintained per approved Station procedures. The use of temporary seals is a common and proven industry practice. The freeze seals will only be installed when the plant is in Mode 5 or 6. The normal charging flow path is not required during for boration or inventory control during these Modes. The affected piping remains seismically qualified with the freeze seal assembly installed. In the unlikely event of a freeze seal failure, leakage past the failed plug would be minimal.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because establishing and maintaining the freeze seals has the same effect on plant operation as closing existing valves 1CV8147 and 1CV8392A upstream of check valve 1CV8379B. No new failure models are introduced. The use of freeze seals to provide isolation capabilities is a proven industry practice. The affected piping remains qualified for seismic loads with the freeze seal assemblies installed.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because this activity does not affect any parameters upon which the Technical Specifications are based.

PROCEDURE REVISION

RP-AA-441
RP-AA-440
RP-AA-202
RP-AA-825

DESCRIPTION

The purpose of these Procedures Revisions was to implement four standardized corporate procedures covering the administrative requirements of the radiological respiratory protection program to incorporate the changes to 10CFR20 which becomes effective on February 4, 2000.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because the respiratory protection procedures are designed to provide training, fit testing, evaluation, selection and use of respiratory protection devices, as well as maintenance and care of respiratory protection devices. There are no plant systems, structures, or components affected by the radiological respiratory program.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because the respiratory protection procedures are designed to provide training, fit testing, evaluation, selection and use of respiratory protection devices, as well as maintenance and care of respiratory protection devices. There are no plant systems, structures, or components affected by the radiological respiratory program.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because this activity does not affect any parameters upon which the Technical Specifications are based.

TEMPORARY MODIFCATION

99-0-013

DESCRIPTION

The purpose of this Temporary Modification (TMOD) was to furnish a source of Instrument Air from the common unit Instrument Air header in the Auxiliary Building to various air-operated valves, devices, and controllers supplied by Instrument Air Tap #3 during refueling outage A1R08 maintenance activities on the Unit 1 Instrument Air System (Turbine Building header).

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because the design of the proposed TMOD considers material compatibility, air quality, structural support, and design loading on existing equipment. In addition, the impact on interfacing equipment was considered. The TMOD provides an equally reliable source of Instrument Air to components/loads in the Auxiliary Building as the normal source. The proposed TMOD has an indirect effect on safety related equipment since the source of Instrument Air is from a common unit header in the Auxiliary Building. A loss of Instrument Air to this equipment, however, cannot cause safety limits to be exceeded. In addition, a loss of this equipment will not adversely affect the reactor core or the Reactor Coolant System, nor will it prevent an orderly shutdown of the units. A failure of the Instrument Air System will not prevent safety-related components or systems from mitigating the consequences of any design-basis accident or performing as intended under emergency conditions.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because the design of this TMOD provides a reliable source of Instrument Air to the affected equipment in the Auxiliary Building while not challenging the ability of the system to provide air to other equipment necessary to support plant operations. The normal operation of the Instrument Air System is not affected by the installation of this TMOD. The proposed TMOD is a passive extension of the Instrument Air System. The only plausible failure mode is a break or breach in the pressure boundary. This type of failure/malfunction does not represent a new failure mode for the system. In addition, design considerations for the TMOD address preventing any impact on interfacing equipment.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because this activity does not affect any parameters upon which the Technical Specifications are based.

TEMPORARY MODIFICATION

99-1-020

DESCRIPTION

The purpose of this Temporary Modification (TMOD) was to provide a temporary source of air for valves 1SX169A/B, 1DG5043A/B and the level instruments for Diesel Oil Storage Tanks (1DO001A/B/C/D) when a normal source of air (Instrument Air) will not be available due to an out-of-service.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because both Instrument Air (IA) and Service Air (SA) Systems are non-safety related systems and are located in the Turbine Building, a non-seismic area. A loss of air to these valves will keep these valves in an open position allowing diesel engine jacket water to circulate. Local and Main Control Room annunciation is provided to monitor water temperature.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because the normal source of air (IA) is non-safety related. The temporary service air (SA) will perform the same function as the Instrument Air System.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because this activity does not affect any parameters upon which the Technical Specifications are based.

NUCLEAR WORK REQUEST (NWR)

990026682-01

DESCRIPTION

The purpose of this Nuclear Work Request was to overhaul the Unit 2 Containment Chiller (2WO01CB). In order to perform the work, various hoses had to be routed through door D-306 requiring it to be propped open. This door is a ventilation boundary.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because propping open the door does not affect any accident/transient initiating conditions. The accident mitigation function of the Auxiliary Building Ventilation (VA) System is not adversely impacted with this door open.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because the VA System is unrelated to the sequence of events leading to the initiation of an accident and the system's accident mitigation and normal functions will be maintained with the door propped open. No new failure mechanisms or modes are created by propping the door open.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because this activity does not affect any parameters upon which the Technical Specifications are based.

NUCLEAR WORK REQUEST (NWR)

990116417-02

DESCRIPTION

The purpose of this Nuclear Work Request was to vacuum resin in the Blowdown Mixed Bed Demineralizer (0WX01DC). To perform this work, a floor plug had to be removed to allow the routing of hoses and equipment. This floor plug is considered a ventilation boundary.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because removal of the floor plug does not have any impact on the events which initiate a Loss of Coolant Accident (LOCA). Removal of the floor plug with the administrative controls in place ensures any design base accident remains bounded by the existing off-site dose boundary analysis calculation.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because the affected structure provides a ventilation boundary for the Auxiliary Building Ventilation (VA) System. Part of the design requirements for the VA System is to limit environmental conditions in various zones in conformance with requirements. The system controls radioactivity in the area served by staging the supply air from the clean areas to the areas of greater potential contamination. Plant operation is not changed. No new failure modes are introduced.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because this activity does not affect any parameters upon which the Technical Specifications are based.

DOCUMENT CHANGE REQUEST

990389

DESCRIPTION

The purpose of this Document Change Request was to revise the data panels in the Electronic Work Control System (EWCS) for valves 1/2DGX001A/B to consistently reflect the correct component classification of these valves as documented in Engineering Request ER9902279.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because the proposed activities do not change any initiating conditions or events associated with any accident or transient, nor do they change the normal operation of the Diesel Generators. The changes to EWCS do not adversely affect Diesel Generator reliability or availability. The Diesel Generators remain capable of performing their intended safety function as required to mitigate the consequences of the affected accidents.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because the changes to EWCS do not have an adverse impact on the reliability of the Diesel Generators, nor do they impact the reliability of any interfacing system. The changes do not introduce any new operational limitations for the affected engine subsystems, nor do they challenge the availability of the Diesel Generators. The changes do not impact Diesel Generator performance in any way. There is no interaction between these changes to the description of the Diesel Generators and any other equipment important to safety.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because this activity does not affect any parameters upon which the Technical Specifications are based.

TEMPORARY MODIFICATION

99-0-012

DESCRIPTION

The purpose of this Temporary Modification (TMOD) was to furnish a source of Instrument Air to components in the pretreatment system of the Make-Up Demineralizer (MUDs) System. Air is supplied from a Service Air Tap (0SA147A) via a dryer and filter assembly to an Instrument Air Tap (0IA1207) during refueling outage A1R08 maintenance activities on the Unit 1 Instrument Air System (Turbine Building header).

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because the design of the proposed TMOD considers material compatibility, pressure boundary integrity, air quality, and air quantity to the affected equipment. In addition, the impact on interfacing equipment was considered. The challenge or risk to the pressure boundary integrity of the Service Air System is no different than for a service connection supplying pneumatic tools, etc. The proposed TMOD has an indirect effect on equipment important to safety since the source of Instrument Air is from the common unit Service Air system. A loss of Service Air can cause the subsequent loss of Instrument Air, however, a loss Instrument Air cannot cause safety limits to be exceeded. In addition, a loss of this equipment will not adversely affect the reactor core or the Reactor Coolant System, nor will it prevent an orderly shutdown of the units. A failure of the Instrument Air System will not prevent safety related components or systems from mitigating the consequences of any design-basis accident or performing as intended under emergency conditions.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because the design of this TMOD provides a reliable source of Instrument Air to the affected equipment in the pretreatment portion of the MUDs System while not challenging the ability of the system to provide air to other equipment necessary to support plant operations. The normal operation of the Instrument Air System is not affected by the installation of this TMOD. A failure mode applicable to the installation of this TMOD is a break in the pressure boundary integrity of the temporary hose and filter/dryer assembly. This does not present a new failure mode for the system since the UFSAR addresses a complete loss of Service Air/Instrument Air. The affected systems relying on the Service Air/Instrument Air System are designed such that a loss of these systems will not prevent safety related components or systems from mitigating the consequences of any design-basis accident or performing as intended under emergency conditions. Individual components are designed such that they fail to their safe position on loss of air.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because this activity does not affect any parameters upon which the Technical Specifications are based.

SPECIAL PROCESS PROCEDURE

SPP 00-002
SPP 00-003

DESCRIPTION

The purpose of these Special Process Procedures was to stroke Component Cooling Water (CC) valves under differential pressure and flow conditions. Valve Operational Test and Evaluation System (VOTES) equipment was used to monitor valve and system operating parameters while the listed valves were being stroked.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because the opening and closing of the Reactor Coolant Pump inlet and outlet isolation valves will only have the effect of slightly lowering CC System pressure during execution of the Special Process Procedure. System pressure will be maintained above the low pressure setpoint. The Reactor Coolant Pumps will not be operating and are not required to be operable during the modes the test was executed. Throttling of CC flow to the Residual Heat Removal System and to the Spent Fuel Pool Heat Exchanger may affect the temperature of the cooled systems, however, temperatures will be maintained within design requirements. The stroking of CC valves and system line up can not initiate or affect initiation of an accident in the modes the test must be performed.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because the function of the CC System is to remove heat from plant components during normal operation, plant cooldown and shutdown operations. The Special Process Procedures align the CC System to achieve the maximum differential pressure across valves 1CC9413B and 1 CC9414 while they are stroked open and closed. Various flows will be throttled to achieve a higher system pressure within the requirements of normal operating procedures and design requirements. During this evolution the plant will be in a Mode which does not require cooling to the components served by the isolated piping.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because this activity does not affect any parameters upon which the Technical Specifications are based.

OUT-OF-SERVICE

990003141

DESCRIPTION

The purpose of this long-term Out of Service (OOS) was to isolate a containment penetration in accordance with Technical Specification 3.6.3. 1SA033 position indicators needed to be adjusted or replaced and the work was scheduled during refueling outage A1R08. 1SA032 was deactivated in it's failed closed condition.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because 1SA032 is a Service Air (SA) System containment isolation valve. The valve was deactivated in its failed closed position. The valve was in its required position to serve its safety function. The SA System is not an initiator of any accident.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because this activity isolates SA from containment. The SA System is not relied upon for any accident scenarios. 1SA032 was in its failed closed position. The normal position of 1SA032 and 1SA033 while in Modes 1-4 is closed. No new accidents or malfunctions were created by this activity.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because this activity does not affect any parameters upon which the Technical Specifications are based.

TECHNICAL SPECIFICATION BASES REVISION

Revision 11

DESCRIPTION

The purpose of this Technical Specification Bases Revision was to provide clarification of potential dilution source flowpaths in the Bases of Technical Specification 3.9.2, "Unborated Water Source Isolation Valves". The change includes a description of when the Refueling Water Storage Tank (RWST) is considered a potential dilution source and the necessary actions to be taken in the unlikely event the RWST becomes a dilution source. In addition, discussion of when the Boric Acid Storage Tank (BAST) would be considered a potential dilution source and the necessary action to be taken in the unlikely event the BAST becomes a potential dilution source was added for consistency and clarity.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because as described in the UFSAR, the probability of a boron dilution event during refueling is precluded by administrative controls which isolate unborated water sources. As described in the Bases for Limiting Condition for Operation 3.9.2, by isolating unborated water sources, a safety analysis for an uncontrolled boron dilution accident in accordance with the Standard Review Plan (NUREG-0800) is not required for Mode 6. The proposed change merely provides clarification of possible dilution flowpaths, thus ensuring an uncontrolled boron dilution event is precluded.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because revising the Bases to provide clarification of potential dilution sources and identifying all potential dilution source flowpaths does not involve a physical alteration of the plant. No new equipment is being introduced, and installed SSCs are not being operated in a new or different manner.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because the proposed Bases change provides clarification of the requirements to ensure that all unborated water sources are isolated, thus precluding an uncontrolled boron dilution accident.

NUCLEAR WORK REQUEST (NWR)

990116418-02

DESCRIPTION

The purpose of this Nuclear Work Request was to change out resin in the Blowdown Mixed Bed Demineralizer (0WX01DD). To support this work, a floor plug had to be removed to allow routing of hoses and equipment. This floor plug is considered part of the ventilation boundary.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because removal of the floor plug does not have any impact on the events which initiate a Loss of Coolant Accident (LOCA). Removal of the floor plug with the administrative controls in place ensures any design base accident remains bounded by the existing off-site dose boundary analysis calculation.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because the affected structure provides a ventilation boundary for Auxiliary Building (VA) System. Part of the design requirements for the VA System is to limit environmental conditions in various zones in conformance with requirements. The system controls radioactivity in the areas served by staging the supply air from the clean areas to the areas of greater potential contamination. Plant operation is not changed. No new failure modes are introduced.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because this activity does not affect any parameters upon which the Technical Specifications are based.

PROCEDURE REVISION

MA-BR-EM-6-00600

DESCRIPTION

The purpose of this Procedure Revision was to provide guidance to perform the following:

a. Replace an installed spare 20 amp breaker in the 48 volt DC Non-ESF River Screen House Bus with a temporary 100 amp breaker.
b. Make temporary connections between the temporary 100 amp breaker, a temporary power supply and a temporary battery (optional).
c. Parallel the temporary power supply to the 48 volt DC Non-ESF River Screen House Bus and shutting down the normal charger.
d. Parallel the normal charger to the 48 volt DC Non-ESF River Screen House Bus and shutting down the temporary charger.
e. Remove the temporary power supply, battery and connections and restoring the 48 volt DC Non-ESF River Screen House Bus to original condition.

Performance of these instructions will install temporary power at sufficient voltage and load capacity to meet normal and transient requirements and limited capacity on a loss of AC power. The system does not interact with Station systems therefore will be no affect on station operations.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because the 48 volt DC Non-ESF River Screen House System is not connected to any Station system and is not an initiator of any transient. The temporary power supply will provide voltage and current sufficient to meet normal and transient loads.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created. Loss of the 48 volt DC Non-ESF River Screen House DC System could lead to a loss of circulating water make-up to the cooling lake. In this case lake level would drop over time potentially resulting in a loss of the ultimate heat sink. This situation is analyzed and actions will be taken in accordance with Tech Spec 3.7.9.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because the activity not affect any parameter upon which the Technical Specifications are based.

UFSAR REVISION

UFSAR Draft Revision Package 8-091

DESCRIPTION

The purpose of this UFSAR Revision was to reflect changes to 10CFR20 and commitment to Regulatory Guide 8.15, Revision 1, with exceptions.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because the respiratory protection program is designed to provide training, fit testing, evaluation, selection and use of respiratory devices, as well as maintenance and care of respiratory protection devices. There are no plant systems, structures, or components affected by the radiological respiratory program.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because the respiratory protection program is designed to provide training, fit testing, evaluation, selection and use of respiratory devices, as well as maintenance and care of respiratory protection devices. There are no plant systems, structures, or components affected by the radiological respiratory program.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because this activity does not affect any parameters upon which the Technical Specifications are based.

UFSAR REVISION

UFSAR Draft Revision Package 8-092

DESCRIPTION

The purpose of this UFSAR Revision was to address elimination of periodic protection channel response time tests based on the implementation of WCAP 14036-P-A guidance.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because the proposed activity involves a change in the methodology for gathering overall channel response time testing data. The change does not affect the maximum time allowed for transient or accident response listed in the UFSAR. The change does not impact the current plant SSCs that support transient and accident mitigation and will not impact the inherent reliability of the installed equipment.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because there are no equipment changes associated with implementing the WCAP methodology. The change provides an alternate methodology for verification that the plant equipment is able to respond to accidents or transients as designed. The NRC issued an SER signifying concurrence with the findings of the WCAP. The equipment listed in the UFSAR was not changed and will function as previously analyzed. Since the equipment assumed to function in accidents and transient listed in the UFSAR is not impacted, there is no change to the type of malfunctions of equipment important to safety. There is no increase in the possibility of a different type of malfunction of equipment important to safety.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because the implementation of WCAP 14036 only changes the method of compiling total response time for the Reactor Trip System and the Engineered Safety Features Actuation Systems. The maximum times specified for accident and transient protection in the UFSAR are not affected. There is no change to the margin of safety.

PROCEDURE REVISION

1BwOA PRI-10
2BwOA PRI-10

DESCRIPTION

The purpose of these Procedure Revisions was to allow placing a Residual Heat Removal (RH) train in operation through the opposite train's cold leg discharge lines with its associated cold leg injection discharge Motor Operated Valve isolated (SI8809A & B).

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because components will be operated in a manner consistent with the current practice; administrative controls will be implemented to prevent a spurious valve operation from creating a common mode failure; and usage will be restricted to periods when Reactor Coolant System pressure is <100 psig.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because in mode 5 and 6 there are 3 transients/accidents of consideration: loss of decay heat removal, loss of shutdown margin, and fuel handling/heavy load accident.

   The second and third items are not affected by this activity because from the perspective of these transients this activity does not differ from the current method of RH operation which is not a credible initiator of the transient/accident. UFSAR section 5.4.7.1 and tables 5.4-17 and 5.4-18 address the spectrum of subsets to the first item. No other accident or transient is credible.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because this activity does not affect any parameters upon which the Technical Specifications are based.

PROCEDURE REVISION

MA-AA-AD-6-00024

DESCRIPTION

The purpose of this Procedure Revision was to establish the requirements for scaffold erection and to provide acceptable safety standards for the erection, inspection, and dismantling of scaffolding.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because the installation of temporary scaffolding does not affect any plant operations.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because the performed activity did not affect the function of any systems during normal or accident conditions.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because this activity does not affect any parameters upon which the Technical Specifications are based.

DESIGN CHANGE

D20-1-98-322-001
D20-1-98-322-002

DESCRIPTION

The purpose of these Design Changes was to remove the Unit 1 Reactor Missile Shield from the Reactor Head Package and set it down atop the missile barrier walls around the Unit 1 "B" Reactor Coolant Pump (RCP). The removal of the missile shield is required to gain access to components of the Control Rod Drive Mechanism (CRDM) and the Digital Rod Position Indication (DRPI) for the purpose of cable replacement. The Reactor Head Package will be located in its laydown position when the missile shield is removed. After the missile shield has been transported to its laydown position atop the "B" RCP walls, it will be used as a laydown area for up to 8000 pounds of uniformly distributed load.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because the removal of the missile shield is an activity that is referred to in UFSAR Section 9.1.4.2.2. The missile shield lifting was performed with the containment building polar crane. Since the missile shield weighs much less than the full head package, and since the same lifting device is used in the exact same configuration for both lifts, the lifting of the missile shield is used in the exact same configuration for both lifts, the lifting of the missile shield is bounded by the analysis performed for the lifting of the full head package. Calculation 19.13.0-BRW-99-0031, Revision 1 demonstrates that the missile shield has adequate design margin against overturning for all load cases, while it is stored atop the "B" RCP compartment walls.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because the removal of the missile shield is an activity that is referred to in UFSAR Section 9.1.4.2.2. Although the laydown area for this activity is not the normal laydown area for the missile shield, calculation 19.13.0-BRW-99-0031 demonstrates that is seismically supported in it laydown position. Therefore, the possibility of an accident or transient of a different type than previously evaluated is not created.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because this activity does not affect any parameters upon which the Technical Specifications are based.

DESIGN CHANGE

D20-0-99-374

DESCRIPTION

The purpose of this Design Change was the addition of a 48" X 36" full encirclement hot tap fitting on the Non-Essential Service Water (WS) System supply header to allow the use of linestop services. In addition, a 4" draining/equalization line is added. The subject 4" line is used during setting of the linestop to depressurize the isolated portion of the system and also during linestop removal to equalize the pressure across the linestop. A 3/4" vent valve is also added downstream of the linestop to provide venting capability during pressure equalization. After the WS supply header was isolated, a butterfly isolation valve was added on the WS supply line.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because this design change does not introduce any adverse interaction with any equipment important to safety. The WS System will continue to serve the non-safety related equipment loads in the Auxiliary and Turbine Buildings. The WS pressure boundary has not been compromised and the WS flow characteristics of the supply header have not been changed significantly as a result of this modification.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because installation of the linestop fittings and isolation valve does not compromise the WS pressure boundary. The affected piping and associated piping supports and structures have been qualified for the loading conditions. Therefore, no adverse interactions with any SCCs are introduced. The function of the WS System is not impacted due to this modification. Based on the above, the proposed modification does not create the possibility of an accident or a transient other than previously evaluated in the UFSAR.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because this activity does not affect any parameters upon which the Technical Specifications are based.

PROCEDURE REVISION

MA-AA-AD-6-00025

DESCRIPTION

The purpose of this Procedure Revision was to establish the requirements to request scaffold installation/modification and removal.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because the installation of temporary scaffolding does not affect any plant operations.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because the performed activity did not affect the function of any systems during normal or accident conditions.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because this activity does not affect any parameters upon which the Technical Specifications are based.

MODIFICATION

D20-1/2-99-360

DESCRIPTION

The purpose of these Modifications was to install a modified Core Exit Thermocouple Nozzle Assemblies (CETNAs), Version 3. The CETNAs seal the interfaces between the Reactor Vessel Head penetrations and the corresponding core exit thermocouple column.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because a detailed stress analysis performed by ABB-Combustion Engineering documents the acceptability of the modified CETNAs configuration. The stress combinations and stress allowables are based on ASME Section III criteria and the Design Specification for the modified CETNAs. The Design Report and the Design Specification, have been reviewed and found acceptable by Braidwood Design Engineering. The ABB-Combustion Engineering Design Report has concluded that the installation of the modified components does not result in additional loading on the head port adapter (female flange), and thus no increase in loading on the lower clamp assembly. Therefore, the original qualification of the head port adapter and lower clamp remains valid.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because a gross failure of the CETNAs would result in an available flowpath through the Reactor Vessel Head adapter. This event would be a small break LOCA that is enveloped by existing analyses in the UFSAR.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because the modified CETNAs and the existing CETNAs meet the applicable ASME Code Section III, Class 1 requirements. The margin of safety, against a failure of these components, provided by the inherent safety factors included in the criteria and requirements of the ASME Code is not reduced.

NUCLEAR WORK REQUEST (NWR)

980067451

DESCRIPTION

The purpose of this Nuclear Work Request was to remove Door D-555 to perform repair/replacement of this door. This door is a ventilation boundary for the 1B/1C Main Stream Isolation Valve (MSIV) Room.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because the Unit 1 Main Stream Tunnel and 1B/C MSIV Room Enclosure Ventilation System is unrelated to the sequence of events leading to the initiation of an accident and it has no mitigating or safety function.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because the proposed activity breaches the ventilation envelope allowing some air to enter the room directly from the outdoors (instead of through the Main Steam Tunnel). While slightly cooler temperatures are expected in the MSIV Room Enclosure, no significant difference in temperature is expected and equipment in the area will be maintained at/near normally maintained temperatures. No credit is taken for this ventilation system during an accident or transient condition.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because this activity does not affect any parameters upon which Technical Specifications are based.

DESIGN CHANGE

D20-1-99-382

DESCRIPTION

The purpose of this Design Change was to modify the Refueling Machine (1FH01G). This design change will install electrical components and Programmable Logic Controller (PLC) software changes to the existing control system. The intent of this change was to enhance the reliability, operation, and control of the Refueling Machine.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because the likelihood of an electrical, mechanical or structural failure is not increased. The proposed changes to the control system will not add any new type of electrical components or alter the existing mechanical or structural configuration of the machine. He proposed changes will enhance the existing control system by installing components and revising the PLC software program with the intention of adding redundancy to selected control logic functions in order to provide additional assurance that a PLC or component failure will not result in undesirable machine operation.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because the proposed changes do not alter the function of the Refueling Machine as described in the SAR documents.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because this activity does not affect any parameters upon which the Technical Specifications are based.

NUCLEAR WORK REQUEST (NWR)

990141283

DESCRIPTION

The purpose of this Nuclear Work Request was to overhaul the 1B Essential Service Water (SX) Pump. To perform this work, a floor plug had to be removed to allow the routing of hoses and equipment. The floor plug is considered part of a ventilation boundary.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because the probability of creating an initiating event of Loss of Offsite Power, Loss of Coolant Accident (LOCA) or High Energy Line Break is not affected. Also, removing the floor plug will not affect any safety related equipment from a ventilation boundary perspective. The Auxiliary Building Ventilation (VA) System will still meet its intended functions, thus all other safety related equipment will not be affected from ventilation concerns. The airflow path essentially remains unchanged, thus VA will continue to function, as before and the offsite dose analysis remains the bounding analysis.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because this action does not have an impact on the events which initiate a LOCA or a radioactive release accident.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because this activity does not affect any parameters upon which the Technical Specifications are based.

UFSAR REVISION

UFSAR Draft Revision Package 8-066

DESCRIPTION

The purpose of this UFSAR Revision was to revise Section 9.4 (Ventilation Systems) Failure Analysis Tables to more clearly describe system component design.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because the affected ventilation systems are unrelated to the sequence of events leading to the initiation of an accident and it has not mitigating or safety function.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because this activity revises the Ventilation Systems UFSAR Failure Analysis Tables to more clearly describe system component design in accordance with Station approved design drawings. It is an administrative change to ensure the UFSAR matches other design documents.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because this activity does not affect any parameters upon which the Technical Specifications are based.

PROCEDURE REVISION

1BwOA PRI-2
2BwOA PRI-2

DESCRIPTION

The purpose of this Procedure Revision was to allow emergency boration by using a Safety Injection (SI) Pump or Chemical and Volume Control System (CV) Pump via SI8801 when the Reactor Coolant System is depressurized.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because this activity provides explicit procedural guidance to assess and mitigate potential over pressure conditions which would reduce the probability of the accident. The probability of equipment malfunction as well as the consequences of both event and equipment malfunction were found un-altered by this activity. Both the SAR and the Technical Specifications describe making SI Pumps and CV Pumps unavailable under certain conditions in Modes 4, 5, and 6. The plant is not configured in a manner different from those described in the UFSAR at any time prior to the onset of initiating event.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created since this activity is utilizing installed mitigation equipment to respond to an accident or malfunction. The equipment will be operated per its design.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because this activity does not affect any parameters upon which the Technical Specifications are based.

FIRE PROTECTION REPORT (FRP) REVISION

FDRP 19-027

DESCRIPTION

The purpose of this Fire Protection Report (FPR) Revision was to revise the Fire Hazards Analysis in Section 2.3 and the FPR Table 2.2-3 combustible loading summary, to delete the specific fire loads currently attributed to paper products in fire zones 2.1-0 and 11.6B-0. This revision also added a bounding description of the combustible loading that results from general office materials permanently stored in the Main Control Room (MCR) and Auxiliary Building Chemistry offices.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because the probability of a design basis fire is based on the occupancy of the fire zone, associated fire hazards (combustibles exposed to potential ignition sources), and the fire protection detection and suppression systems provided to mitigate fires that originate within the zone. This change does not change the zone occupancy, fire detection, or fire suppression capability in the affected zones. The change only adds combustible loading to the zones. However, the increased combustible loading, including the generic office loading described by the change, does not challenge the capability of the zone fire protection design features or adversely affect the ability to achieve and maintain safe shutdown of the plant.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because the change of replacing the specific fire loads attributed to paper products with the generic office fire loading does not create the possibility of an accident or malfunction of a type different from those previously evaluated. The combustible office materials are primarily stored in metal file cabinets, desks, and bookcases and are not normally exposed to ignition sources and are unlikely to become a design basis fire initiator. In this configuration, the stored materials do not constitute an unusual hazard or create the potential for a different type of accident. The additional fire loading attributed to this change does not affect the Safe Shutdown Analysis conclusions and will not create a new type of accident.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because this activity does not affect any parameters upon which the Technical Specifications are based.

UFSAR REVISION

UFSAR Draft Revision Package 8-088

DESCRIPTION

The purpose of this UFSAR Revision was to correct the description of the High Energy Line Break (HELB) subcompartment pressurization analysis for the Positive Displacement (PD) Charging Pump rooms and the Boric Acid Tank (BAT) room. The change identified that the PD Charging Pump rooms are not subject to pressurization or an increase in temperature and the BAT room is not an area influenced by a HELB. In addition, Section 3.11 was revised to delete the example given for the Centrifugal Charging Pump room. As discussed in Section A3.6.1.1, the Centrifugal Charging Pump rooms contain high pressure, low temperature lines which will not cause room pressurization or temperature increase.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because the probability of a HELB was unchanged by this UFSAR change. The change does not add or delete piping that is classified as high energy. The consequences of a HELB were not changed. No new subcompartments were affected and no changes to plant structure were made, thus the structural integrity of subcompartments was unchanged. The environmental qualification (EQ) conditions in these areas and the qualification of components required for safe shutdown were unaffected. This change did not change the operation or design of any plant systems, structures, or components. No new components were added. The change had no affect on equipment failures or malfunctions. No new failure modes were created.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because the EQ conditions in the BAT and PD charging pump rooms were not adversely affected. The qualification of equipment important to safety was unaffected. No new failure modes were created.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because this activity does not affect any parameters upon which the Technical Specifications are based.

TEMPORARY MODIFICATION

00-1-003

DESCRIPTION

The purpose of this Temporary Modification (TMOD) was to provide an alternate source of 120 Vac power to the Gamma Metrics 1A Post Accident Neutron Monitor (PANM) 1NR11E from non-safety related Motor Control Center (MCC) 133X4 (1AP44E). The other PANM source range monitor (1NR13E) and Westinghouse source range monitors N31 & N32 will remain operable and will also be used as a source of neutron monitoring during the core reload. The Westinghouse source range channel 1NR31 will also be powered from a non-safety related source as a result of the Bus 141 outage, per procedure BwOP AP-59T5. Westinghouse source range channel 1NR32 and the 1B PANM 1NR13E will be fed from their normal safety related power sources during the core re-load. Providing alternate 120 Vac power to the 1NR11E will make all four channels of source range instrumentation available during refueling activities concurrent with the planned Bus 141 outage.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because the installation of a temporary power feed to the 1A Post Accident Neutron Monitor will not increase the probability or the consequences of an unplanned RCS dilution event or a fuel handling accident as described in the SAR. Temporary power is being provided to the 1A PANM to ensure that all four channels of source range instrumentation are available to monitor any changes in core activity during refueling activities concurrent with the Bus 141 outage and has no interface with any SSC required to mitigate these accidents as described in the SAR.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because PANM 1NR11E is one of four source range detectors that can be used to provide indications of changes in neutron flux. The Technical Specification Bases for Section 3.9.3 "Nuclear Instrumentation" allows the use of either the Westinghouse source range detectors or the Gamma-Metrics Post Accident Neutron Monitors for source range instrumentation in Mode 6. Implementation of this TMOD will not result in the creation of any new accident or plant transient that has not been previously analyzed.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because the temporary change to the plant is consistent with the criteria that was used in the development of the requirements, associated action items, associated surveillances, and Bases for the Technical Specification sections. Thus, the margin of safety is not reduced.

CORE RELOAD DESIGN

Unit 1 Cycle 9

DESCRIPTION

The purpose of the Core Reload Design was to ensure the core reload was designed to perform under current nominal design parameters, Technical Specifications, and related Bases such that core operating characteristics will be equivalent or less limiting than those previously reviewed and accepted; or for those postulated accidents analyzed and reported in the Byron/Braidwood UFSAR which could potentially be affected by the fuel reload, re-analyses or re-evaluations have been performed to demonstrate that the results of the postulated events are within allowable limits.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because the design and construction of the reload core, and its fuel assemblies, have been implemented to the same standards as the previously installed plant equipment. The reload core for Cycle 9, including the fuel design and core component (e.g., thimble plug elimination, Wet Annular Burnable Absorber life extension), satisfies all fuel mechanical, nuclear, thermal-hydraulic, and transient analysis design criteria.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because fuel is not directly related to the probability of any previously evaluated accidents, but adhering to applicable design criteria and standards precludes challenges to components and systems that could increase the probability of an accident. Based on the above, the proposed changes do not involve an increase in the probability of these accidents which were previously described in the safety analysis report.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because each of the Technical Specifications and Technical Requirements Manual Limiting Conditions for Operation were reviewed to determine the impact of the Unit 1 Cycle 9 reload core on the acceptance limits/margin of safety. Operation of Unit 1 Cycle 9, with the introduction of Region 11 fuel has been analyzed in accordance with NRC approved methodologies. The reload core has been designed to operate within safety analysis acceptance limits and will therefore maintain safety margins.

SETPOINT CHANGE

SSCR 00-038

DESCRIPTION

The purpose of this Setpoint Change (SSCR) was to revise the setpoints of pressure switch 2PS-DG095A. This device senses the pressure in Diesel Generator Starting Air Receiver and controls the cycling (start/stop) sequence for the 2A Diesel Generator (DG) Number 1 Air Compressor and 2A DG Number 1 Air Dryer. Currently at 240 psig in the receiver, pressure contacts start the associated air dryer and initiate a 90 second time delay. After the 90 second time delay the compressor starts. When receiver pressure reaches 250 psig both the compressor and dryer stop. This change will lower the cycle band such that the compressor cycle start/stop cycle starts at 225 psig and stops at 235 psig. Other than the cycle setpoint, the SSCR will not impact the starting logic for the 2A DG Number 1 Air Dryer and Air Compressor for an emergency mode or test mode start of the 2A DG.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because the proposed activities do not change any initiating conditions or events associated with any accident or transient, nor do they change the normal operation of the Diesel Generators. The changes to implemented under this SSCR do not adversely affect Diesel Generator reliability or availability. The Diesel Generators remain capable of performing their intended safety function as required to mitigate the consequences of the affected accidents.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because the changes implemented do not have adverse impact on the reliability of the 2A DG, nor do they impact the reliability of any interfacing system. The changes do not introduce any new operational limitations for the affected engine subsystems, nor do they challenge the availability of the 2A DG. The changes do not impact 2A DG performance in any way. There is no interaction between these changes and any other equipment important to safety.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because the implementation of the changes/activities do not challenge the reliability or availability of the Diesel Generators as a source of AC power and therefore does not reduce the margin of safety as described in the Bases of Technical Specifications and supporting SAR documents.

ENGINEERING REQUEST

9902328
9902330
9902332
9902333

DESCRIPTION

The purpose of these Engineering Requests was to evaluate the installation of freeze seals on the Unit 1 High Head Safety Injection lines 1SI08JA(B,C,D) - 1 1/2" to allow repair of valves 1SI8810A-D while in Mode 6 or defueled.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because the freeze seals are being used as contingencies for downstream isolation in case primary isolation check valves 1SI8900A-D leak by. The proposed activities do not change any initiating conditions or events associated with any accident or transient. The additional weight was evaluated and is not a concern. Any leakage as a result of a failed freeze seal will be minor and contained within the reactor containment structure. There will be no increase in offsite radiation exposure to the general public. The proposed line freezes will be performed in Mode 6 or defueled.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because the freeze seals only act as a secondary downstream isolation back-up to the primary isolation check valves (1SI8900A-D). All related equipment will also be OOS during these activities.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because all Technical Specifications requirements were met.

PROCEDURE REVISION
BwFP FH-14
BwFP FH-14T1
BwFP FH-14T2

DESCRIPTION

The purpose of these Procedure Revisions was to allow increased travel speeds for the refueling machine bridge and trolley, and to add information about an emergency circuit which can automatically or manually remove system power on a detected system failure.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because this equipment is not relied upon to remain functional following a design basis event, to ensure the integrity of the reactor pressure boundary, the capability to shutdown the reactor or maintain it in a safe shutdown condition, or prevent, or mitigate the consequences of accidents that could result in potential offsite releases.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because the function of the refueling machine has not changed. Only the control system has been affected by upgrading to state-of-the-art control technology. No new failure modes are created by these changes. Structural failure modes are not altered. Control systems will fail "as-is". However, the machine is designed to allow manipulation of a fuel assembly to a safe condition using manual controls.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because this activity does not affect any parameter upon which the Technical Specifications are based..

NUCLEAR WORK REQUEST (NWR)

990101475

DESCRIPTION

The purpose of this Nuclear Work Request was to perform linestop activities on the Non-essential Service Water (WS) System supply header. The major linestop equipment consist of a plugging machine (approximate weight 10,000 lbs), a cutting/hot tapping machine (approximate weight 4,500 lbs) and a 36" "gate" valve (approximate weight 8,000 lbs). After the WS Supply Header is isolated, a butterfly isolation valve was installed on WS supply line. During linestopping activities a 4" draining/equalization line was used to depressurize the isolated portion of the system and also during linestop removal to equalize the pressure across the linestop. A 3/4" vent valve downstream of the linestop was also used to provide venting capability during pressure equalization. Upon completion of the linestop activities and removal of the plugging machine and the "Gate" valve, a completion plug and a blind flange was installed to restore the pressure boundary of the WS System.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because the linestop activities do not introduce any adverse interaction with any equipment important to safety. The WS System during linestopping continued to serve the non-safety related equipment loads in Unit 2. The probability of loss of the WS pressure boundary is insignificant and the flow characteristics to the Unit 2 equipment are not affected by the linestopping activities. Based on the above, the linestopping activities do not create the possibility of a different type of malfunction than previously evaluated in the SAR. There is no adverse impact on equipment important to safety as a result of the installation of linestop equipment.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because installation of the linestop equipment does not compromise the WS pressure boundary. Loss of the linestop after the plug is in place implies a catastrophic failure of the plugging machine, which is not a likely event. Rigging of the linestop equipment has been evaluated and all temporary loads were found to be acceptable. Therefore, no adverse interactions with any SSCs are introduced

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because this activity does not affect any parameters upon which the Technical Specification are based.

NUCLEAR WORK REQUEST (NWR)

980120176

DESCRIPTION

The purpose of this Nuclear Work Request was to temporarily place a portable sump pump within the Unit 1 Reactor Floor Drain (RF) Oil Separator to prevent water from reaching the sump while calibration was in process on 1LT-PC002 and 1LT-PC003. This allowed water to be removed from the RF System prior to flowing into the sump and being measured by the 1RF008 Containment Floor Drain Sump Flow Monitor. This activity was restricted to Modes 5, 6, and defueled.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because the Reactor Floor Drain Sump itself does not mitigate accident consequences or affect accident probability. The 1RF008 Containment Floor Drain Sump Monitor measures unidentified RCS leakage in containment. The placement of a portable sump pump within the Reactor Building Oil Separator was restricted to Modes 5, 6, and defueled. During these modes, the 1RF008 was not required, per Technical Specification 3.4.15 for measuring unidentified leakage, due to the pressure and temperature of the RCS.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because besides leak detection of the RCS, the only other safety function of the RF System is containment isolation. The exit flowpath of the portable sump from containment is the same as that of the existing sump pumps. Containment isolation/integrity is not affected.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because this activity does not affect any parameters upon which the Technical Specifications are based.

ENGINEERING REQUEST

9902341
9902342

DESCRIPTION

The purpose of these Engineering Requests was to install freeze seals downstream of check valves 1SI8819A and 1SI8819C. These check valves leak by and need to be replaced. The freeze seals provide the necessary isolation to allow work in the check valves. The freeze seals will be established and maintained during Modes 6 or defueled.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because the affected piping and components remain fully qualified for all applicable design loads. In the unlikely event of a failed freeze seal, an elbow located between the freeze location and the check valve would restrict the movement of the freeze plug. Thus, any flow past the plug would be minimal. In addition, a failed freeze seal is isolable by isolating the associated Residual Heat Removal (RH) train.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because the freeze seals will be established and controlled per approved Station procedures. The use of freeze seals to provide isolation is a common and proven industry practice. The freeze seal allows the work to be performed on the Safety Injection (SI) System check valves and the RH System will be configured such that the affected injection flowpath is not required to support RH operability requirements in Mode 6 or defueled.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because operational configurations and component isolation will be established such that the RH and SI Systems will remain fully capable of performing their required functions while work is performed on the SI check valves. All Technical Specification requirements were met.

PLANT BARRIER IMPAIRMENT

DESCRIPTION

The purpose of this Plant Barrier Impairment was to prop open Door D-356 between the chemistry high level laboratory and the Auxiliary Building 426 elevation general area to allow routing of cables for Temporary electrical power during the refueling outage A1R08 bus outage.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because the probability of an accident is not affected since the Laboratory Ventilation (VL) and Auxiliary Building Ventilation (VA) Systems do not initiate or alter the initial conditions of any accident. The consequences of an accident/malfunction of important to safety equipment is not affected since this activity does not affect the capability of VL to shutdown on a high radiation signal or the filtering capability of VA.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because the VL system does not initiate or alter the initial conditions of any accident and its capability to shutdown on a high radiation signal will be maintained. No uncontrolled radioactive release paths are created by this activity since the filter efficiency of VA is at least as good as that provided by VL.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because this activity does not affect any parameters upon which the Technical Specifications are based.

ENGINEERING REQUEST

9902261

DESCRIPTION

The purpose of this Engineering Request was to install a freeze seal on a Boron Concentration Monitoring System (BCMS) line to repair a leaking 3/8" tubing compression fitting on valve 1CV8137.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because the freeze seal provides downstream isolation for check valve 1CV8137 since it cannot be isolated from a direct path to the Volume Control Tank (VCT). The proposed activities do not change any initiating conditions or events associated with any accident or transient. The additional weight was evaluated and is not a concern. Any leakage as a result of a failed freeze seal will be minor and contained within the Auxiliary Building Curved Wall Area (CWA). There will be no increase in offsite radiation exposure to the general public.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because the freeze seals act as a downstream isolation for check valve 1CV8137. The affected line is currently isolated and will be out of service when the freeze seal is performed. The Boron Concentration Monitoring System (BCMS) is not used at Braidwood. VCT inventory loss thru the 3/8" tubing due to a failed freeze seal is well within the make-up capabilities to the VCT. Flooding due to a failed freeze seal for this 3/8" tubing does not govern this location (CWA). Contingency measures will consist of installing the check valve or a compression fitting tubing cap, or simply crimping the tubing closed to stop the leakage.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because this activity does not affect any parameters upon which the Technical Specifications are based.

OUT-OF-SERVICE

980004883

DESCRIPTION

The purpose of this long term Out of Service (OOS) was to leave the Hot Water Heating Coil (0VL03A), (waterside) OOS for an extended period of time. Procedures OP-AA-01-201 and RS-AA-104 require that a prolonged OOS (greater than six months) be evaluated to ensure that the continued unavailability of the affected equipment does not represent an Unreviewed Safety Question.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because the prolonged OOS associated with heating coil 0VL03A cannot create the initiating events or conditions that impact the probability of occurrence of a radioactive release. Normal Laboratory Ventilation (VL) System performance and operation is not impacted by the OOS such that it could result in an uncontrolled spread or release of contamination. No SSCs relied upon to mitigate the consequences of evaluated accidents will be impacted by this OOS and off-site doses will not be changed.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because no adverse impacts are created for any interfacing equipment important to safety and no uncontrolled release paths are created by this OOS and no new failure mechanisms or modes are created by the installation of the OOS. Therefore, the consequences of an accident or malfunction of equipment important to safety are not increased.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because this activity because does not affect any parameters upon which the Technical Specifications are based.

NUCLEAR WORK REQUEST (NWR)

990145851
990145930

DESCRIPTION

The purpose of these Nuclear Work Requests was to repair/replace the 1/2SX001A valves. To perform this work, a floor plug had to be removed to allow the routing of hoses and equipment. This floor plug is considered part of the ventilation boundary.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because the probability of creating an initiating event of Loss of Offsite Power, Loss of Coolant Accident (LOCA) or High Energy Line Break is not affected. Also, removing the floor plug will not affect any safety related equipment from a ventilation boundary perspective. The Auxiliary Building Ventilation (VA) System will still meet its intended functions, thus all other safety related equipment will not be affected from ventilation concerns. The airflow path essentially remains unchanged, thus VA will continue to function as before and the offsite dose analysis remains the bounding analysis.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because this action does not have an impact on the events which initiate a LOCA or a radioactive release accident.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because this activity does not affect any parameters upon which the Technical Specifications are based.

PROCEDURE REVISION

1BwOSR 3.7.5.6-1
1BwOSR 3.7.5.6-2

DESCRIPTION

The purpose of this Procedure Revision was to revise the Auxiliary Feedwater (AF) flow path operability surveillance procedures to reflect an Inservice Testing Program (IST) Program partial stroke versus a full open stroke. The revision was prompted by new accident analysis flow rates for the AF check valves, which are not achieved in the full flow procedures. Per Generic Letter 89-04, a check valve stroke at flow rates less than the accident analysis flow rates is a partial stroke and not a full open stroke. The IST Program required full open stroke of these check valves is being moved to other procedures. The surveillances are performed in MODE 3 or below.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because the changes to the subject procedures are administrative in nature. There are no changes to the actual steps taken to perform the surveillances. Therefore, the changes will not increase the probability of occurrence or the consequences of an accident or a malfunction of equipment important to safety.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because the procedure changes are administrative in nature. There are no changes to the actual steps taken to perform the surveillances. Therefore, the changes will not create a new accident or malfunction. Additionally the check valves will be maintained at the same quality level and therefore the reliability of the check valves is not reduced.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because all Technical Specification requirements were met.

UFSAR REVISION

UFSAR Draft Revision Package 8-097

DESCRIPTION

The purpose of this UFSAR Revision was to revise Section E.30 to correct an incomplete sentence, remove incorrect model numbers from the description of the wide-range monitor gas detectors, and correct the description of the three types of radioactive gas detectors.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because updating the description of the wide range gas monitors does not affect plant operation or equipment. These descriptive changes do not alter the configuration or function of the wide range gas monitors. There is no effect on equipment failures or malfunctions.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because updating the description of the wide range gas monitors does not alter the configuration or function of the wide range gas monitors. There is no effect on equipment failures or malfunctions.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because this activity does not affect any parameters upon which the Technical Specifications are based.

DESIGN CHANGE

D20-1-99-354

DESCRIPTION

The purpose of this Design Change is to install the necessary wiring, conduit, seismic supports and disconnect switch for providing power to the spare Reactor Coolant Pump (RCP) motor for storage in the Fuel Handling Building railroad trackway.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because the power for the spare RCP motor is provided from a non-safety related Motor Control Center (MCC) in the Auxiliary Power System and does not interface with any system required for safe shutdown or accident mitigation. The raceway for the associated cabling is seismically supported. Since the motor will be kept in place via seismic house keeping practices, seismic events will not cause the spare RCP to interact with any Station components. This change, along with the additional combustible loading added to Fire Zone 12.1.1.0 due to this change, will not impact the fire protection features of the Fuel Handling Building or the plant's ability to maintain or achieve a safe shutdown condition. Therefore the probability of occurrence or the consequences of any accident or malfunction is not increased.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because the power for the Spare RCP motor is provided from a non-safety related MCC in the Auxiliary Power System and does not interface with any system required for safe shutdown or accident mitigation. The raceway for the associated cabling is seismically supported. Since the motor will be kept in place via seismic house keeping practices, seismic events will not cause the spare RCP to interact with any Station components. This change, along with the additional combustible loading added, will not impact the fire protection features of the Fuel Handling Building or the plant's ability to maintain or achieve a safe shutdown condition. Therefore the proposed activity does not create a possibility of an accident or malfunction of a different type than any previously evaluated.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because this activity does not affect any parameters upon which the Technical Specifications are based.

PLANT BARRIER IMPAIRMENT

DESCRIPTION

The purpose of this Plant Barrier Impairment (PBI) was to allow for opening and removing Door D-560 to repair/replace Doors D-551, D-555, D-559 and D-560. These doors are ventilation boundaries for the Main Steam Safety Valve (MSSV) Room enclosures.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because the Main Steam Tunnels and MSIV Enclosure ventilation systems are unrelated to the sequence of events leading to the initiation of an accident and has no mitigating or safety function.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because the proposed activities breach the ventilation envelopes allowing some air to enter the rooms directly from the outdoors (instead of through the Main Steam Tunnel). While slightly cooler temperatures are expected in the MSIV Enclosures, no significant difference in temperature is expected and equipment in the areas will be maintained at/near normally maintained temperatures. No credit is taken for these ventilation systems during an accident or transient condition.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because this activity does not affect any parameters upon which the Technical Specifications are based.

NUCLEAR WORK REQUEST (NWR)

990146210
990146212

DESCRIPTION

The purpose of these Nuclear Work Requests was to perform repairs to the 1B Essential Service Water (SX) Pump. To perform this work, a floor plug had to be removed to allow the routing of hoses and equipment. This floor plug is considered part of the ventilation boundary.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because the probability of creating an initiating event of Loss of Offsite Power, Loss of Coolant Accident (LOCA) or High Energy Line Break is not affected. Also, removing the floor plug will not affect any safety related equipment from a ventilation boundary perspective. The Auxiliary Building Ventilation (VA) System will still meet its intended functions, thus all other safety related equipment will not be affected from ventilation concerns. The airflow path essentially remains unchanged, thus VA will continue to function as before and the offsite dose analysis remains the bounding analysis.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because this action does not have an impact on the events which initiate a LOCA or a radioactive release accident.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because this activity does not affect any parameters upon which the Technical Specifications are based.

NUCLEAR WORK REQUEST (NWR)

990138871

DESCRIPTION

The purpose of this Nuclear Work Request was to perform work on the Unit 1 Polar Crane. To support this work, Doors D-305 and D-301 had to be propped open to allow the routing of Temporary power cables. These doors are considered part of the ventilation boundary.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because the accident mitigation function and normal functions of the Auxiliary Building Ventilation (VA) System will still continue to maintain the building at a negative pressure, control post accident radioactivity leaking from the ECCS equipment within required limits, and maintain environmental qualification zone requirements for the affected areas.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created due to the Auxiliary Building Ventilation System and doors D-305 and D-306 are unrelated to the sequence of events leading to the initiation of an accident. Since the system's accident mitigation and normal functions will be maintained, the possibility of an accident or malfunction of a different type from those evaluated in the SAR is not created.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because this activity does not affect any parameters upon which the Technical Specifications are based.

MODIFICATION

E20-1-97-283
E20-2-97-283

DESCRIPTION

The purpose of these Modifications was to implement the Best Estimate Analyzer Core Operations Nuclear – (BEACON-DMM) functions and applications. BEACON-DMM is a stand-alone computer system that receives data from the Plant Process Computer (PPC). This data is analyzed and can be monitored.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because the BEACON Methodology is a software package from Westinghouse. The software is loaded on a computer that has no safety function. The BEACON-DMM computer can be turned off, and have no impact on the plant. The software has no function that would increase the probability from occurring nor inhibit operations that are used to mitigate of any of the aforementioned accidents. The BEACON-DMM receives its data from a non-safety related Plant Process Computer. The BEACON-DMM methodology satisfies all fuel mechanical, nuclear, thermal hydraulic and transient analysis design criteria. The BEACON Methodology doesn't change any of the assumed initial conditions for any of the accidents

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because the BEACON-DMM Methodology does not create the possibility of an accident or transient different type than any previously evaluated in the Safety Analysis Report because it is a software core monitoring package. Evaluation of the power distribution and core reactivity parameters is performed with the approved BEACON Methods. There is no physical connection to any safety-related system or any system necessary for the safe shutdown of the plant. The cycle specific BEACON-DMM Model is based on the Advances Nodal Code model, however, BEACON-DMM generates the real time predicted power distribution reflecting the core operational history. Consistency between the BEACON-DMM and Advance Nodal Code predicted power distribution for core nominal conditions is verified and documented during the cycle specific model development process. The methodology does not change or invalidate accident analysis limits and assumptions presented in the Byron/Braidwood SAR.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because the BEACON Methodology is the tool to calculate these peaking factors and was previously NRC approved. This activity does not affect any parameters upon which the Technical Specifications are based.

DESIGN CHANGE

9900176
9900177

DESCRIPTION

The purpose of these Design Changes was to disable the Essential Service Water (SX) low flow alarm when the Diesel Generator (DG) is at standby mode or running below 280 rpm. The alarm will be enabled 20 seconds after the diesel speed reaches 280 rpm.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because the SX low flow alarm is not used as an input to the start logic of the Diesel Generator nor is it used as an input to systems or components essential to safe shutdown or to mitigate a transient following an accident.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because the 20 second delay to enable the alarm after the DG is up to speed is provided by a spare contact of an existing time delay relay that currently is used to inhibit the lube oil (engine lube oil and turbo lube oil) trips and alarms until the diesels has reached 280 rpm. In addition, this change will not use the components differently so no malfunction of a different type is created for the components or the circuit overall.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because this activity does not affect any parameter upon which the Technical Specifications are based.

TECHNICAL SPECIFICATION BASES REVISION

B.3.6.3

DESCRIPTION

The purpose of this Technical Specification Bases Revision was to reflect relief valve installation is in response to Generic Letter 96-06 to Bases Table 3.6.3-1, "Primary containment Isolation Valves." The relief valves were installed to provide thermal overpressure relief under design basis accident conditions. The relief valves were installed inside containment between the inside containment isolation valve and the outside containment isolation valve and are thus categorized as containment isolation valves.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because the probability of occurrence of any accident or transient is defined by the initiators of that event. Revising the Bases to reflect installation of containment isolation valves and modifying the actions accordingly will not affect the initiator of any event. Therefore, the probability of occurrence of an accident is not increased. Revising the Bases to reflect the installation of containment isolation valves and modifying the Actions accordingly ensures that potential paths to the environment through containment isolation valves are minimized. Therefore, the consequences of an accident are not increased. Furthermore, the Bases change has no affect equipment failures or malfunctions.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because the systems associated with the affected containment penetration flowpaths will continue to function as designed. These changes provide assurance that the containment function assumed in the safety analysis will be satisfied. No new failure modes are introduced.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because revising the Bases to reflect installation of containment isolation valves and modifying the Actions accordingly ensure the containment function is maintained.

FIRE PROTECTION REPORT (FPR) REVISION

FDRP 19-029

DESCRIPTION

The purpose of this Fire Protection Report (FPR) Revision was to reflect that internal conduit penetration seals installed for fire protection purposes are designed and function as noncombustible seals to limit the travel of smoke. These internal conduit seals are not required components to maintain the fire rating of an assembly. Criteria in the FPR that describes specific conduit configurations that do not require an internal conduit seal is being revised to more completely reflect criteria developed based upon actual fire test results performed by an industry group with an independent test laboratory.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because the changes involved the design criteria regarding internal conduit penetration seals installed for fire protection purposes and the treatment of these seals in relation to periodic surveillance and application of compensatory measures if degraded. These changes do not increase the probability of occurrence of a fire or the consequences of a fire because fire testing has demonstrated that fire cannot propagate from one zone into adjacent zones through unsealed conduits. These changes do not adversely affect the plant capability to achieve and maintain post fire shutdown.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because the changes do not modify the approved design of typical penetration seal details. These changes do not alter Station criteria or practices associated with seals on the external side of conduits, embedded spare sleeves, or seals on the inside of conduit that serve other design functions such as security, missile, high energy line break, flood, ventilation or radiation barriers.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because this activity does not affect any parameter upon which the Technical Specifications are based.

TECHNICAL REQUIREMENTS MANUAL REVISION

00-004

DESCRIPTION

The purpose of this Technical Requirements Manual Revision was to Section 3.9.a, "Decay Time" to revise the time that the reactor shall be subcritical from ≥ 100 hrs to ≥ 90 hrs before commencing movement of irradiated fuel from the reactor vessel to the Spent Fuel Pool (SFP). Technical Specification Bases Section 3.9.4, "Containment Penetrations," was also revised to reference the new required decay time of ≥ 90 hours. The reduction in decay time only applied to the de-fueling operations during refueling outage A1R08.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because the proposed change does not increase the failure rate of the refueling equipment or human error. The consequences of the accident are not increased since (1) the calculated dose increase due to the offload time change is more than offset by increased filter efficiencies, and by conservatism in the power level and peaking factor assumed in the analysis and (2) the total does calculated remains below the NRC approved limit of 75 Rem to the thyroid and 25 Rem to the whole body. The radiation monitoring equipment that is required to operate in support of the assumptions in the accident analysis has been found to be qualified for the dose rate due to a Fuel Handling Accident with an In Core Decay Time (ICDT) of 90 hours. The Fuel Handling Building emergency exhaust filter train components, fans, isolation dampers, and instrumentation are not affected by the ICDT change.

   The probability of the loss of spent fuel pool cooling is not increased as a result of reducing the ICDT. In the event of the failure of a spent fuel pool pump or loss of cooling to a spent fuel pool heat exchanger, the second cooling train provides 100% backup capability, thus assuring continued cooling of the spent fuel pit. The ICDT has no bearing on the failure probabilities of the Spent Fuel Pool Cooling System (SFPCS).

   The consequences of a loss of spent fuel pool cooling are not increased as a result of reducing the ICDT to 90 hrs. The additional decay heat input into the SFP due to the earlier core offload time has been evaluated. The increase in heat load of 1 MBTU/hr from a 90 hours ICDT is more than offset by the reduction in background heat load of about 5.4 MBTU/hr from the current spent fuel pool fuel inventory. Therefore, the maximum fuel pool temperature and the time to boil from an ICDT of 90 hrs for refueling outage A1R08 is bounded by the current design basis analysis for the spent fuel pool. The licensing amendment for the SFP re-rack project has been approved by the NRC via letter addressed to O.D. Kingsley (ComEd) from G. F. Dick (NRR) dated March 1, 2000.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because the proposed change does not involve a physical alteration of the plant. No new equipment is being introduced, and no installed equipment is being operated in a new or different manner. The proposed change does not affect the capability of

the fuel handling equipment. Thus, it is concluded that the proposed change does not create a new or different kind of accident.

The proposed change only affects the ICDT that the spent fuel assemblies can be moved from the reactor core into the spent fuel pool. The fuel transfer will be controlled by approved Station procedures and there will be no changes to the fuel handling equipment. The fuel pool temperature resulting from the full core fuel transfer has been evaluated to be below the design limits for the SFPCS equipment. Therefore, there is no increase in the possibility of a different type of malfunction of equipment important to safety than any previously evaluated.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because Tech spec 3.3.8 "Fuel Handling Building (FHB) area radiation monitor is to initiate, upon a radiation signal, the FHB ventilation system to ensure that radiation material in the FHB atmosphere are filtered and adsorbed prior to being exhausted to the environment. The area monitors have been evaluated to be able to perform their design function under the radiation field resulting from the FHA of an assembly with an ICDT of 90 hours. Consequently, the proposed change does not involve a reduction in the margin of safety.

   The change in the temperature of the spent fuel pool water was evaluated for the potential increase in reactivity. The design basis criticality analysis was performed assuming a spent fuel pool water temperature of 4° C (39° F), which is well below the spent fuel pool temperature during refueling time. Because the reactivity temperature coefficient in the spent fuel pool is negative, temperatures greater than 4° C will result in a decrease in reactivity. The effect of a dropped fuel assembly on the criticality of the spent fuel pool was also evaluated in the design basis criticality analysis. Reducing the ICDT to 90 hours does not alter the damage caused by the impact of a dropped assembly. Criticality of the spent fuel pool will remain ≤ 0.95. the proposed change does not involve a reduction in the margin of safety.

ENGINEERING REQUEST

9902570

DESCRIPTION

The purpose of this Engineering Request was to install a freeze seal on line 1SI48AF-3/5" on the ASME Class 2 side of the 3/8" orifice nipple off line 1SI09BB-10". The freeze seal provided the necessary isolation to perform repairs on line 1SI48AF-3/4" to repair a weld.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because the freeze seal was established and controlled per approved Station procedures. The use of a temporary freeze seal to provide isolation is a common and proven industry practice. The affected piping is adequately supported and the weight of the freeze seal assembly is expected to be less than 4.5 lbs. This addition of this concentrated weight is well within established criteria and can easily withstand the loads associated with a seismic event. In addition, the freeze seal activity does not change any initiating conditions or events associated with a seismic event. The freeze seal is located inside the containment building. In the unlikely event of a failed freeze, the resulting leakage would be minimal. Any radioactive release from the leakage would be bounded by the fact the Reactor Coolant System (RCS) is opened to the atmosphere during this activity. In addition, the affected portion of the Residual Heat Removal (RH) System can be isolated without impacting decay heat removal capabilities.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because the installation of a freeze seal on the Safety Injection (SI) System test line does not create a different type of malfunction of equipment important to safety than was previously evaluated. The freeze seal will be established and controlled per approved Station procedures. The use of freeze seals to provide isolation is a common and proven industry practice. Operational configurations and component isolation will be established such that the RH and SI Systems will remain fully capable of performing their required functions in Mode 6 and defueled while work is performed on the SI System test line.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because operational configurations and the ability for component isolation will be established such that the RH and SI Systems will remain fully capable of performing their required functions while work is performed on the SI System test line. Technical Specifications were met.

DOCUMENT CHANGE REQUEST

DCR 99-0517

DESCRIPTION

The purpose of this Document Change Request was to reflect the as-built line sizes of 1SI97AA and 1SI97BA. These lines are the pressure sensing lines for 1FI-0972, the Safety Injection (SI) System Pump minimum flow instrument. The documents changed were drawings M-61-1B, M-2061-6, and EWCS data fields.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because the change had no affect on equipment failures or malfunctions and the design functions of the Safety Injection System were unaffected. Since the change will have no affect on operation of the Safety Injection System, and it remains fully capable of performing its required functions, there can be no increase in the consequences of an equipment malfunction. This change is administrative in nature to have the drawings reflect actual plant conditions.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because the piping integrity of the minflow line is unaffected by this change. The design and operation of the Safety Injection Pump minflow line is unaffected. The flow instrument is fully capable of functioning adequately with 1/2" sensing lines. This change is administrative in nature to have the drawings reflect actual plant conditions.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because this activity does not affect any parameters upon which the Technical Specifications are based.

TECHNICAL REQUIREMENTS MANUAL

TRM Revision TCR #00-001

DESCRIPTION

The purpose of this Technical Requirements Manual (TRM) Temporary Change Request (TCR) was to revise the Applicability for TRM Limiting Condition for Operation (TLCO) 3.4.a, "Pressurizer Safety Valves-Shutdown," from the current Modes 4 and 5 to Mode 4 and Mode 5 with the RCS intact. The effect of the change will allow operation in Mode 5 without an Operable Pressurizer Safety Valve if a relief path is provided.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because the Pressurizer Safety Valves are installed to provide overpressure protection for the Reactor Coolant System (RCS). They are relied upon for mitigation of at-power transients. They are not assumed to operate to mitigate a Mode 5 transient. The proposed change does not alter the failure mode or mechanism of the valve, nor does it create a different set of system interations which would lead to more frequent initiating events. For the overpressure transients (mass or heat addition), the Low Temperature Overpressure Protection (LTOP) System comprised of the Pressurizer Power Operated Relief Valves (PORVs) in the LTOP mode, the Residual Heat Removal (RH) suction relief valves, a combination of a Pressurizer PORV in the LTOP mode and a RH suction relief valve, or an adequate RCS vent are credited with mitigation. This ensures the limits of 10 CFR 50 Appendix G are met and the integrity of the Reactor Coolant Pressure Boundary (RCPB) is not compromised.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because no new equipment is being introduced, and no installed equipment is being operated in a new or different manner. No automatic actions previously credited with mitigation of any design transient are affected. The ability to accomplish any credited manual actions for event mitigation is not affected. There are no new system interactions introduced by this change, and the current Failure Modes and Effects Analyses are not impacted. As such, no new or different malfunctions are introduced.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because revising the Mode of Applicability of TRM TLCO 3.4.a has no affect on the ability to meet the requirements of Technical Specification (TS) 2.1.2, "RCS Pressure Safety Limit." Satisfying the requirements of TS 3.4.12, "LTOP," ensures the limits of 10 CFR 50 Appendix G are met and the integrity of the RCPB is not compromised. The limits of 10 CFR 50 Appendix G are well below the pressurizer safety valve setpoint. The ability to pressurize the RCS is limited with the RCS not intact.

DESIGN CHANGE

9800037

DESCRIPTION

The purpose of this Design Change was to eliminate the existing electro-cube (RG 1782-2) located in 1PM11J and serving solenoid 1PS230A while installing the vendor supplied and recommended blocking rectifier inside the electrical portion of the solenoid valve head assembly. This change also addresses the inclusion of Valcor Drawings into the Electronic Work Control System (EWCS).

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because the Process Sampling (PS) valves are containment isolation valves for the post accident hydrogen monitor. The valves are not related to the cause of any accidents nor do they affect the probability of any accident occurring.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because the proposed fix is to install the blocking rectifiers inside the valves to eliminate spurious ground alarms is purely an electrical enhancement. It does not change the valves' safety function or create new accidents or malfunctions.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because this activity does not affect any parameters upon which the Technical Specifications are based.

TEMPORARY MODIFICATION

00-1-001

DESCRIPTION

The purpose of this Temporary Modification (TMOD) was to furnish a contingency source of Instrument Air (IA) to the Reactor Coolant System loop 1/loop 4 and loop 2/loop 3 air headers in the Unit 1 containment during refueling outage A1R08. The TMOD is intended to supply IA, if required, to complete fuel movements (refueling machine air supply) or to operate air operated valves. The supply of air will be from the construction department's or Westinghouse's manifold/connection (or Service Air if available) via dryers to Instrument Air tap valve 1IA652 and Instrument Air tap valve 1IA663 within the Unit 1 containment.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because the initiating event or condition for a Fuel Handling Accident Inside Containment is the release of a fuel assembly while being handled by refueling equipment. On loss of instrument air to the refueling machine the gripper mechanism fails as-is. Air is required to release the fuel assembly. in addition, other interlocks are provided to prevent the inadvertent release of a fuel assembly suspended from the gripper. Therefore, the failure of the TMOD to provide air to the gripper mechanism with a fuel assembly suspended from the refueling machine will not create the initiating event or condition for the affected accident. The ability to isolate the containment in the event of a Fuel Handling Accident is not affected by the installation, or the failure, of the TMOD.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because the proposed TMOD is a passive extension of the IA and SA Systems. A break or breach in the pressure boundary of the TMOD does not represent a new failure mode for the affected systems. In addition, design considerations for the TMOD address preventing any impact on interfacing equipment.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because this activity does not affect any parameters upon which the Technical Specifications are based.

SPECIAL PROCESS PROCEDURE

SPP 00-006

DESCRIPTION

The purpose of this Special Process Procedure was to satisfy the Inservice Testing Program (IST) full stroke open exercise test requirement for the 1A Auxiliary Feedwater (AF) Pump discharge check valve (1AF029A). As allowed by NRC Generic Letter 89-04, the test will accomplish the check valve's full open stroke by passing the maximum required accident condition flow of 1024 gpm through the valve. The test procedure accounted for instrument uncertainty such that the measured flow value less instrument uncertainty will be verified to be ≥ 1024 gpm.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because in cold shutdown or de-fueled conditions, when the test procedure will be performed, there are no consequences to any of the accidents requiring the AF System except the "Loss of Non-emergency AC Power to the Plant Auxiliaries," "Steam Generator Tube Rupture (SGTR)," and "Loss of Coolant Accidents Resulting From a Spectrum of Postulated Piping Breaks Within the Reactor Coolant Pressure Boundary (LOCA)."

   For these 3 accidents, the AF System would not be used for mitigation. The LOCA and SGTR would be addressed using the ECCS systems. The Loss of Non-emergency AC Power would be dealt with using features of the Auxiliary Power System. Therefore, having the AF System in an abnormal configuration for testing purposes would not increase the consequences of these accidents should they occur.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because the test procedure will flow water to the steam generators from the AF System during cold shutdown or refueling conditions. The secondary side of the Steam Generators will be protected as follows: 1) Steam Generator pressure and temperature limitations will be followed as described in Technical Requirements Manual 3.7.a, 2) Chemistry will be notified prior to adding water to the Steam Generators to ensure any secondary side water chemistry issues or concerns are addressed, and 3) the test will be stopped if any Steam Generator wide range level reaches 95% to prevent putting water into the Main Steam lines. The reactivity change to the primary side of the plant associated with adding cold water to the secondary side of the Steam Generators while in the prescribed plant conditions will not pose a challenge to the shutdown margin.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because this activity does not affect any parameters upon which the Technical Specifications are based.

DESIGN CHANGE

D20-0-96-282-007

DESCRIPTION

The purpose of this Design Change was to replace the AR3 relays with DC contactors in breaker closing control circuitry of Unit 0 Component Cooling Water (CC) System Pump 0CC01P electrical feed breakers.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because failure of the affected CC Pump to start is not an accident initiator for any of the accidents. Failure of a CC pump is addressed in Table 9.2-5. Failure of the affected 4160V ESF bus due to existing AR3 relay failure is not an existing postulated accident initiator. Nor is the failure of the ESF bus due to a new DC contactor failure considered an accident initiator. The 4160V ESF buses and affected pump are safety related and implicitly or explicitly assumed to operate during or after applicable accidents. The intent of this change is to reduce the likelihood of the failure of a CC System pump electrical feed breaker to close on a valid signal. Therefore, installation of the DC contactors in place of the existing AR3 relays is intended to decrease the probability of a malfunction of equipment important to safety.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because this change does not: 1) alter any SSCs as described in the UFSAR, 2) result in a revision to the UFSAR, 3) impact any UFSAR wording, numbers, drawings, tables, or figures, 4) alter the function of the Auxiliary Power or CC System or components during any plant operating modes, 5) alter any initial conditions or assumptions used in UFSAR accident analyses, or 6) create any new failure modes.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because this activity does not affect any parameters upon which the Technical Specifications are based.

PROCEDURE REVISION

1BwOS XPC-W1
2BwOS XPC-W1
BwOP RC-4

DESCRIPTION

The purpose of these Procedure Revisions was to allow for "containment closure capability" rather than containment closure for activity related to reduced inventory conditions. This change allows for normal and reduced inventory conditions without containment closure. Containment closure is not a specific requirement of reduced inventory operation per NRC Generic Letter 88-17. The ability to achieve containment closure is a requirement of the Generic Letter.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because containment closure capability prior to core uncovery will still be maintained. This is an administrative change and has no effect on plant equipment.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because containment closure is performed after an accident or malfunction; it is not a precursor to other activities. This is an administrative change and does not add any new equipment to the plant.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because all Technical Specification requirements were still met.

PLANT BARRIER IMPAIRMENT

DESCRIPTION

The purpose of these Plant Barrier Impairments was to prop open Doors D-231, SD-156, & D-225 to allow for routing of hoses from the Auxiliary Building general area 364' into the A Essential Service Water (SX) Pump room. The doors are considered ventilation boundaries.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because the accident mitigation function and normal functions of the Auxiliary Building Ventilation (VA) System are unaffected since the building will continue to be maintained at a negative pressure, post accident radioactivity leaking from the ECCS equipment will be controlled within the required limits, and environmental qualification zone requirements will be maintained for the affected areas.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because the Auxiliary Building Ventilation System and affected doors are unrelated to the sequence of events leading to the initiation of an accident. Since the system's accident mitigation and normal functions will be maintained, the possibility of an accident or malfunction of a different type from those previously evaluated in the SAR is not created.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because this activity does not affect any parameters upon which the Technical Specifications are based.

DESIGN CHANGE

D20-0-00-311-002

DESCRIPTION

The purpose of this Design Change was to install a vendor supplied Chemical Feed House and a new silt dispersant tank outside the Lake Screen House along with all interconnections and appropriate interfaces.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because the new Chemical Feed House is replacing various chemical injection skids. As such, it is just another method of chemical injection. The existing injection and supply piping is still used. All interconnections and interfaces have been evaluated as part of the design. All chemicals have been previously used and/or evaluated and are within the existing environmental permit.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because the affected systems are basically plant support systems. They do not initiate or alter the initial conditions of any accidents. They are not relied on to mitigate any accidents. As such, these systems cannot create an accident or transient of a different type than previously evaluated.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because this activity does not have any affect on equipment or parameters upon which the Technical Specifications are based.

DOCUMENT CHANGE REQUEST

9800528

DESCRIPTION

The purpose of this Document Change Request (DCR) was to revise drawing M-117, sheet 2 to show valve 0V1013 as a freon operated valve and not as an air operated valve. Valve 0V1013 is the Hot Gas Bypass Valve on the chiller unit for the HVAC system serving the Remote Shutdown Panel area and the Radwaste Control Room.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because the change in the gas supply to the operator for valve 0V1013 does not have any impact on the initial conditions of any accident. The probability of occurrence of any accident or transient is not increased. The operation of the Hot Gas Bypass Valve is not affected. No equipment required to mitigate the consequences of any accident is affected by the change to the operator for valve 0V1013 from air operated to freon operated.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because the change in gas supply to the Hot Gas Bypass Valve 0V1013 does not have an impact on equipment important to safety. Additionally, the change made will not alter the operation of the affected valve and the Radwaste Control Room and Remote Shutdown Panel HVAC System will continue to operate as described in Section 9.4.3 of the UFSAR.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because this activity does not affect any parameters upon which the Technical Specifications are based.

DOCUMENT CHANGE REQUEST

990551

DESCRIPTION

The purpose of this Document Change Request was to revise drawing M-58 sheet 4 to show the as-built configuration of the Carbon Dioxide (CO_2) System piping in the Lower Cable Spreading Rooms (LCSR). In addition, drawing M-58 sheet 2 and M-579 sheet 8 and 9 were also revised to reflect the as-built configuration of the CO2 discharge piping to the Upper Cable Spreading Rooms (UCSR).

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because the Carbon Dioxide Fire Protection System does not have any impact on the initiating conditions that would lead to any accident analyzed in the UFSAR. The CO2 suppression system will continue to operate as required in support of 10CFR50 Appendix R commitments and will continue to operate as described in the Fire Protection Report. There is no impact on equipment failures or malfunctions and new failure modes are not created.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because this activity does not affect the operation of the CO2 suppression systems for the Unit 1 and Unit 2 LCSR and UCSR. Critical dimensions on system isometric drawings match the as-built configuration. These drawings are used as input to piping stress analyses. The qualification of the affected piping is not affected. No other plant equipment is impacted. Therefore, this activity does not create the possibility of an accident or transient of a different type than any previously evaluated.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because this activity does not affect any parameters upon which the Technical Specifications are based.

NUCLEAR WORK REQUEST (NWR)

990148978

DESCRIPTION

The purpose of this Nuclear Work Request was to change out resin in the Blowdown Mixed Bed Demineralizer (0WX01DB). To perform this work, a floor plug had to be removed to allow the routing of hoses and equipment. This floor plug is considered a ventilation boundary.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because removal of the floor plug does not have any impact on the events which initiate a Loss of Coolant Accident (LOCA). Removal of the floor plug with the administrative controls in place ensures any design base accident remains bounded by the existing off-site dose boundary analysis calculation.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because the affected structure provides a ventilation boundary for Auxiliary Building Ventilation (VA) System. Part of the design requirements for the VA System is to limit environmental conditions in various zones in conformance with requirements. The system controls radioactivity in the areas served by staging the supply air from the clean areas to the areas of greater potential contamination. Plant operation is not changed. No new failure modes are introduced.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because this activity does not affect any parameters upon which the Technical Specifications are based.

FIRE PROTECTION REPORT (FPR) REVISION

FDRP 19-34

DESCRIPTION

The purpose of this Fire Protection Report Revision was to reflect changes to the Fire Load of Zone 18.12 (Lake Screen House) in order to incorporate changes made by Modification D20-0-000-311-002. This modification revised the quantity of plastic (PVC) piping and the quantity of cable insulation inside the Lake Screen House.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because the change in combustible materials described in this evaluation does not affect the probability of a design basis fire. The change does not add an ignition source for a fire. The additional combustible material does not impair the safe shutdown capability of the plant.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because in the event of a fire at the Lake Screen House, the additional combustible material results in an increase in fire severity of only 18 seconds. This has no impact on the design basis fire or on the conclusions as stated in the Fire Hazards Analysis for Fire Zone 18.12. The small fire loading increase will not affect the currently evaluated design basis fire or create a different type of malfunction of safety related equipment.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because this activity does not affect any parameters upon which the Technical Specifications are based.

DESIGN CHANGE

D20-1/2-00-317

DESCRIPTION

The purpose of this Design Change was to replace the existing air conditioning Edpac units in the Process Computer Rooms with units manufactured by Liebert. Minor revisions to the existing piping were required.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because the Process Computer Room cooling units do not initiate or alter the initiating conditions of any accidents. These non-safety-related units are not required to mitigate any accidents. The water supplies to the units are similar to those of the existing units. The same power supply is used. Therefore, the proposed activities do not increase the probability of any accident or transient.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because this design change replaces the existing units with minor revisions to non-safety related connected systems. There are no safety-related components in the Process Computer Rooms. The increase in weight is insignificant. The Process Computers are not-safety related. Additionally, these units provide back-up capability to the normally operating non-safety ventilation system. Therefore, there is no possibility of an accident or malfunction of a different type.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because this activity does not affect any parameters upon which the Technical Specifications are based.

TECHNICAL SPECIFICATION BASES REVISION

Revision 14 (B 3.6.5, B 3.6.6)

DESCRIPTION

The purpose of this Technical Specification Bases Revision was to correct the maximum containment air temperature. Reanalysis of the Main Steam Line Break (MSLB) transient as a result of the Steam Generator Replacement Project (SGRP) resulted in a maximum containment temperature of 333°F and is the current analysis of record.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because the temperature increase as a result of the SGRP does not change any initiating conditions defined in the design basis. The offsite dose analysis is not increased by the change in peak temperature inside containment during a MSLB. The containment and containment systems that function to prevent or control the release of radioactive fission products are not adversely affected by the increase in peak temperature because the structure is within its design temperature and the environmental qualification equipment remains qualified. The containment structure and the equipment required to mitigate the consequences of the accident will perform their intended function(s) at the revised peak temperature.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because no new accidents, scenarios, or malfunctions different from those evaluated in the SAR are created by this change to the peak temperature inside containment. The increase in the temperature inside containment is a transient response and not an initiator to any accident. Components impacted by the increased peak temperature have been analyzed and will function as required. No new failure modes or potential for malfunction leading to a different type of accident are introduced.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because the change revises the peak containment temperature consistent with the current analysis of record.

TECHNICAL REQUIREMENTS MANUAL

Temporary Revision 99-001

DESCRIPTION

The purpose of this Technical Requirements Manual (TRM) Revision was to remove Temporary TRM Change 99-001 to restore the surveillance frequency of non-return check valve inspections (TSR 3.3.g.6) to 40 months.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because the extraction steam non-return check valves are not safety related. No credit is taken for these valves in any accident analysis. Failure of these valves does not affect the safe shutdown of the plant.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because there is no potential of an accident or transient being created as these valves will continue to operate as originally designed.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because this activity does not affect any parameters upon which the Technical Specifications are based.

TEMPORARY MODIFICATION

00-0-001

DESCRIPTION

The purpose of this Temporary Modification was to install a temporary hypochlorite tank in the Makeup Demineralizer Building to support treatment of potable water. The permanent tank was leaking and needed to be replaced.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because the potable water system is a non-safety related system. It is not an accident initiator and is not relied upon to mitigate the consequences of an accident.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because the temporary tank did not support or affect any safety related equipment. There is no equipment important to safety in the Make-up Demineralizer Building.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because this activity does not affect any parameters upon which the Technical Specifications are based.

PROCEDURE REVISION

BwAP 1110-1, 0BwOS FP.2.1.W-1; 0BwOS FP.2.2.W-1; 0BwOS FP.2.3.W-1; 0BwOS FP.2.1.M-2, 0BwOS FP.2.2.M-2, 0BwOS FP.2.3.M-1, BwOP FP-5, BwOP FP-8, 0BwOS FP.2.1.M-1, 1BwOS FP.2.1.M-1, 2BwOS FP.2.1.M-1, 1BwOS FP.4.1.M-1, 2BwOS FP.4.1.M-1, 0BwOS FP.2.1.Q-3, 1BwOS FP.2.1.Q-1, 2BwOS FP.2.1.Q-1, 1BwOS FP.4.1.Q-1, 2BwOS FP.4.1.Q-1, 0BwOS FP-M1 ,0BwOS FP.2.1.SA-1, 0BwOS Fp.2.1.A-2, BwHS 4009-038, and MA-BR-EM-5-00010

DESCRIPTION

The purpose of these Procedure Revisions was to change to the surveillance procedures associated with Fire Protection features of the plant. The changes affect the frequency that these procedures are performed and in some cases, remove components from the scope of the procedure. The affected procedures do not change the configuration of any plant system. The Fire Protection Report (FPR) was also revised to discuss deviations from the NFPA fire code because of the modified surveillance frequencies.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because the changes to BwAP 1110-1, the FPR, and associated surveillance procedures do not change the occupancy or increase the fire hazards in any plant fire zone. No ignition sources or combustibles were added or altered as a result of this activity. Fire Protection features are not altered by this activity, nor are compensatory actions changed if a feature is taken out of service. This activity only affects the interval surveillance procedures are performed and specific components tested. These procedures are not used or credited to mitigate a design basis fire. Therefore, this activity does not increase the probability of occurrence of the consequence of a design basis fire or malfunction of equipment.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because this activity makes changes to the surveillance procedures associated with Fire Protection features of the plant. The changes affect the frequency that these existing procedures are performed and in some cases, remove components from the scope of the procedure. The affected procedures do not change the configuration of any plant system. The test/inspection method, system alignment, and required actions of any procedure is not changed by this activity. Therefore, the possibility of an accident or malfunction of a different type is not created.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because this activity does not affect any parameters upon which the Technical Specifications are based.

DESIGN CHANGE

D20-0-00-316

DESCRIPTION

The purpose of this Design Change was to correct the inlet and outlet orientation of Component Cooling Water (CC) System thermal relief valve 0CC9432. This valve is a 3/4" x 1" relief valve. Reversing the inlet and outlet connections of the valve requires reducers to adapt to the current inlet and outlet piping. The valve orientation and piping were incorrectly designed and installed during original construction. Relief valve 0CC9432 was intended to provide thermal overpressure protection for the A Train Residual Heat Removal (RH) Heat Exchanger CC common return header when the common CC Pump is aligned for service with its suction isolated from a surge tank. The valve and piping were originally designed and installed with the discharge of relief valve 0CC9432 connected to the A Train RH Heat Exchanger CC common return header instead of protecting it from thermal over-pressurization.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because this change cannot create the initiating conditions for the affected accidents or change the probability of occurrence of the affected accidents. CC System accident mitigation functions are not impacted by this change.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because this design change restores the originally intended design configuration of the 0CC9432 valve without adversely impacting CC or interfacing system performance. No new failure mechanisms or modes are created by this change.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because this activity does not affect any parameters upon which the Technical Specifications are based.

UFSAR REVISION

UFSAR Draft Revision Package 8-049

DESCRIPTION

The purpose of this UFSAR Revision was to revise Appendix A to take exception to Regulatory Position C.6 for Regulatory Guide 1.44, "Control of the Use of Sensitized Stainless Steel", to state that the intergranular corrosion test specified for sensitized austenitic stainless steel welding procedures is not required.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because the need to perform the intergranular corrosion tests specified in Regulatory Guide 1.44 has been shown to be unnecessary, especially in a Pressurizer Water Reactor (PWR) environment. The intent of Regulatory Guide 1.44 is met by 1) protecting stainless steel components from coming in contact with detrimental materials, 2) by purchasing stainless steel components in accordance with the appropriate ASME material specifications, and 3) by maintaining a low oxygen content in the PWR environment.

   As a result of the low oxygen content contained in the reactor coolant during normal operation, a PWR inherently complies with the intent of Regulatory Guide 1.44. The intergranular stress corrosion cracking that could result from sensitization is effectively suppressed by the normal operating PWR environment. Protection from other contaminants is assured through implementation of a chemical control program, and administrative procedures to protect stainless steel materials from harmful contaminants. These controls allow the austenitic stainless steel of the reactor coolant pressure boundary to meet the requirements of 10 CFR 50 Appendix A General Design Criteria 4, relative to compatibility of components with environmental conditions.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because thus, removal of the intergranular corrosion test from the statement of compliance with Regulatory Guide 1.44 does not create the possibility of a different type of malfunction of equipment important to safety than any previously evaluated.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because this activity does not affect any parameters upon which the Technical Specifications are based.

PROCEDURE REVISION

MA-AP-EM-6-00605

DESCRIPTION

The purpose of this Procedure Revision was to provide guidance for installing a jumper around a failed cell in a 125-volt DC ESF Battery. Installing the jumper will reduce the battery from 58 cells to 57 cells. This will have the effect of reducing the float voltage of the battery by approximately 2.20 volt and the end of load profile voltage by approximately 1.86 volts. It will also restore the battery to an operable status.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because during the performance of this activity the affected battery will be considered inoperable and the appropriate Limiting Condition for Operation (LCO) entered. The installation of the blocking diode will prevent charging current and place the remaining cells on an open circuit condition. The short amount of time the charging current is blocked will not affect the remaining cells. The total charging current for the battery is generally in milli-amps so the reduced load will not affect the associated battery charger. The cables used when jumping out the affected cell will meet the original design requirements of ampacity, seismic, and resistance. Removing a failed cell will not affect the remaining cells. Float requirements and surveillances will remain consistent with vendor and Tech Spec requirements. The probability of failure of the remaining cells will not change.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because during the performance of this activity the affected battery will be inoperable and the appropriate LCO entered. Accidents during this period are bounded by the current analysis. After the affected cell has been disconnected from the battery string a jumper will be installed between the two adjacent cells restoring continuity through the battery. The jumpers that replace the inter-cell/inter-tier/inter-rack connector will meet the original design requirements of ampacity, seismic, and resistance.

3. The margin of safety, as defined in the basis of the Technical Specification, is not reduced because all Technical Specification requirements were met.

TECHNICAL SPECIFICATION BASES REVISION

99-20
(B 3.7.5 and B 3.8.3)

DESCRIPTION

The purpose of this Technical Specification Bases Revision was to revise the Bases Sections B 3.7.5, "Auxiliary Feedwater System", and B 3.8.3, "Diesel Fuel Oil", to reflect the specific revisions of the ASTM standards that are used to perform the required testing for Diesel Fuel Oil.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because testing requirements and quality specifications for the diesel fuel oil used for the Auxiliary Feedwater (AF) diesel engines and Emergency Diesel Generators (EDG) do not have any impact on the probability of occurrence of any plant accident or transient. Testing diesel fuel oil in accordance with the most recent editions of the applicable ASTM standards will ensure that the quality of the fuel oil is maintained. The EDGs and AF Pumps will thus remain operable in support of plant operation upon a loss of offsite power event.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because the proposed changes will have no impact on equipment failures or malfunctions. The changes to the Technical Specifications Bases do not change any operational or performance characteristic of the diesel generators or diesel oil system. There are no impacts on interfacing equipment important to safety introduced under these changes. Therefore, these changes cannot introduce or create a malfunction different than that previously evaluated.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because Technical Specification section 3.7.5 ensures that the AF System will perform its design safety function to mitigate the consequences of accidents that could result in the overpressurization of the reactor coolant pressure boundary. The tests for the fuel oil are a means of assuring the fuel has not been contaminated with substance that would have an immediate impact on diesel engine combustion.

   Technical Specifications 3.8.1 and 3.8.2 ensure that a reliable source of emergence power is available to equipment necessary to mitigate the consequences of abnormal operating occurrences, accidents, or transients. Technical Specification 3.8.3 ensures that the Diesel Oil system is capable of supporting the diesel generators during post-LOCA recovery.

DESIGN CHANGE

D20-0-99-316-001

DESCRIPTION

The purpose of this Design Change was to make the unused/non-operational flow elements 0FE-VA015, 16, 17 and 18 optional and therefore, allow the internals of these flow elements (i.e. the velocity sensing tubes and the airflow straighteners) to be removed. The removal of the velocity sensing tubes and the airflow straighteners will eliminate the potential for fouling/clogging the affected ductwork/plenums and improve the operation of the Auxiliary Building Ventilation (VA) System.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because the portions of the VA System affected by the changes neither initiate/alter the initial conditions of any accident/transient, nor mitigate any accident. Therefore, the changes do not increase the probability of occurrence of any accident or the consequences of an accident or a malfunction of equipment important to safety previously evaluated in the safety analysis report.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because the deletion of the flow straighteners has no adverse impact on the flow characteristics of the VA exhaust subsystem. As such, the VA System will continue to operate or function with the same operating characteristics in either normal or accident conditions. The straightener removal actually reduces the potential for upsetting airflow balance should they become clogged. Since the system's accident mitigation and normal functions will be maintained, the possibility of an accident or malfunction of a different type from those evaluated in the SAR is not created.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because this activity does not affect any parameters upon which the Technical Specifications are based.

DESIGN CHANGE

9900285
9900286

DESCRIPTION

The purpose of these Design Changes was to replace the Technical Specification (TS) requirements associated with the automatic Boron Dilution Protection System (BDPS) (BDPS TS LCO 3.3.9 and Bases B3.3.9), with alarms, indicators, procedures, and controls. When alerted by one or more of these alarms during plant modes 3, 4, or 5, operations personnel will be instructed to take administrative action to procedurally align the Chemical and Volume Control (CV) System to the Refueling Water Storage Tank (RWST).

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because the NRC staff has previously determined that the proposed amendment involves no significant increase in the amounts, and no significant change in the types, of any effluents that may be released offsite, and that there is no significant increase in individual or cumulative occupational radiation exposure. The Commission has previously issued a proposed finding that the Technical Specification amendment involves no significant hazards consideration, and there has been no public comment on such finding (61 FR3503).

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because the proposed activity removes the automatic features associated with mitigating a dilution transient, and replaces it with operator action thereby maintaining the intended function. The design change only effects the logic and equipment associated with mitigating an already established transient, and does not influence logic or equipment that could possibly create an accident or malfunction of a different type than that previously evaluated in the safety analysis.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because ComEd has revised the analysis of the CVCS malfunction mitigated by operator action in Modes 3, 4 and 5, using the revised analytical methodology discussed with the NRC as documented in the letter from L.R. Wharton (U.S. NRC) to Licensee (Commonwealth Edison, Texas Utilities Electric, Union Electric, and Wolf Creek Nuclear Operating Corporation), "Utility Subgroup Technical Approach to Modify or Delete the Boron Dilution Mitigation system," dated February 8, 1993. A License Amendment Request to revise the Technical Specification requirements has been submitted to the NRC.

NUCLEAR WORK REQUEST (NWR)

970107250
990038161
990038137

DESCRIPTION

The purpose of these Nuclear Work Requests was to clean the 2B Residual Heat Removal (RH) room cubicle cooler and address the potential installation of a freeze seal to perform this work. The freeze seal may have been needed if the Essential Service Water (SX) isolation valves leaked by. If these isolation valves leaked by, they also would be repaired/replaced during this work activity.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because the affected piping has been found to remain seismically qualified with the additional weight of the freeze seal assembly. Leakage from a freeze seal failure during this time would be minimal and bounded by the existing flooding analysis. The freeze seal has the same effect on plant equipment as closing the isolation valves to the coolers during maintenance activities. The SX System is not a radiological boundary and remains fully functional.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because the freeze seals have the same effect on plant equipment as closing the isolation valves to the subject coolers during maintenance activities. Flooding has been previously evaluated and bounds a possible failed freeze seal.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because all Technical Specification requirements were met.

TEMPORARY MODIFICATION

TMOD 00-0-002

DESCRIPTION

The purpose of this Temporary Modification (TMOD) was to install an alternate flow path from the sodium aluminate pumps to the 0A Clarator (0WM02DA). The sodium aluminate pump discharge is connected to line 0WMY9A via a nylon braided hose. This connection was broken downstream of the combined pump discharge pressure gauge. Valves and fittings, as required, and plastic or tygon tubing were field routed from the outlet of the pressure guage to a ½" cross fitting on line 0WM87A. The hose effectively bypassed line 0WMY9A. Line 0WMMY9A was blocked with solidified/hardened sodium aluminate. The temporary bypass line installed under this TMOD permitted sodium aluminate injection as required to support the operation of the 0A Clarator and the Make-Up Demineralizer system.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because the changes to the Make-up Demineralizer pretreatment system under this activity did not change or impact the initiating conditions or events that result in any accident or transient evaluated in the UFSAR. This activity did not reduce the capability of any system relied upon to perform accident mitigation functions.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because the changes incorporated under this TMOD did not impact any accident or transient initiating condition, nor did they impact systems relied upon to mitigate the consequences of any accident. No failure mechanisms were created by this TMOD which would impact the operation of the Make-up Demineralizer pretreatment system or any interfacing systems.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because this activity does not affect any parameters upon which the Technical Specifications are based.

NUCLEAR WORK REQUEST (NWR)

990144434

DESCRIPTION

The purpose of this Nuclear Work Request was to remove/install removable block walls for access to the filter pipe tunnels #2 and #3 located in the Auxiliary Building at Elevation 383' in order to perform Inservice Inspections (ISI) on certain components. These walls are considered part of the ventilation boundary.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased since the accident mitigation function and normal functions of the Auxiliary Building Ventilation (VA) System will still continue to maintain the building at a negative pressure, control post accident radioactivity leaking from the ECCS equipment within required limits, and maintain environmental qualification zone requirements for the affected areas.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created involving the Auxiliary Building Ventilation System or removal of the block walls which are unrelated to the sequence of events leading to the initiation of an accident. Since the system's accident mitigation and normal functions will be maintained, the possibility of an accident or malfunction of a different type from those evaluated in the SAR is not created.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because this activity does not affect any parameters upon which the Technical Specifications are based.

NUCLEAR WORK REQUEST (NWR)

990175464-01

DESCRIPTION

The purpose of this Nuclear Work Request was to disable the "High-High Traveling Screen Differential Pressure" trip for Circulating Water (CW) Pump 2CW01PB for instruments 2LDS-SW007 and 2LDR-SW007. The 2B CW Pump was still in service, and was expected to remain in this condition until the cause of the recent trip of 2CW01PB could be determined.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because the purpose of the trip signal is to minimize the chance of damaging the CW Pump resulting from low pump suction pressure. The elimination of the traveling screen high differential pressure trip signal on the suction side of the 2B Circulating Water Pump reduces the probability of a CW Pump trip. With the elimination of this trip signal, the pump will not trip unless manually tripped or unless the pump fails. By reducing the probability of a CW Pump trip, the probability of a turbine trip due to low condenser vacuum is decreased. The elimination of the trip signal has no impact on any fission product boundary and does not impact the ability of any system to mitigate the consequences of an accident. Equipment important to safety is not adversely affected by the elimination of the traveling screen high differential pressure trip signal. The screen wash and circulating water systems are not relied upon to mitigate the consequences of an accident.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because the traveling screen high differential pressure trip signal is intended to trip the associated CW Pump before the pump is damaged due to low suction pressure. By eliminating the trip signal, this pump protection feature is lost. The failure of the CW Pump could result in low condenser vacuum, leading to a turbine trip. This is an analyzed transient. No other accidents or transients are created or eliminating the trip signal. The CW Pumps are non-safety related and are not required to mitigate the effects of any transient or accident. The failure of a CW Pump does not impact the ability of any equipment important to safety from performing as designed. No new failure modes are introduced.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because this activity does not affect any parameters upon which the Technical Specifications are based.

UFSAR REVISION

UFSAR Draft Revision Package 8-171

DESCRIPTION

The purpose of this UFSAR Revision was to revise the response to NRC Regulatory Guide 1.82, Revision 0. The response to regulatory position #10 was revised to account for the potential that the Containment Spray (CS) nozzle orifices may not be the most limiting restriction in the systems drawing a suction on the containment recirculation sump during a design basis accident. The size of the smallest opening is through the ECCS sump screens based on the actual measurements taken during the refueling outage B2R08 at Byron Unit 2 and during refueling outage A1R08 at Braidwood Unit 1. The size of a particle capable of passing through the sump screen was updated.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased since this change has no effect on any of the initiating factors for any accidents. The consequences are not increased since the design function of the ECCS is maintained based on the physical properties of the debris generated, the available openings through the valves, the flowpath through two centrifugal pumps (Centrifugal Charging and Safety Injection) before reaching the throttle valves, and the high flow velocities at the restrictions within the valves. The different screen type (3/16 inch actual opening size) results in an open area through the inner screens of 49.1%. The affected calculations have been reviewed. The open area through the inner screen that has been evaluated in DCR Type calculations 990628 and 990629 is 33%. The existing calculations are thus conservative with respect to Byron Unit 2 and Braidwood Unit 1 and do not need to be revised.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because there is no change to any component/structure that could create a possibility of a different type of malfunction or accident. This activity revises the UFSAR to reflect the potential configuration of the throttle valves in the ECCS injection lines. This change does not create the possibility of a different type of equipment malfunction.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because the original documents that discussed compliance with Regulatory Guide 1.82 Revision 0, indicated that the sizing of the recirculation sump screen was in compliance with the specific recommendations of the Regulatory Guide. That is, the screen openings were smaller than any opening in the systems served by the pumps that take suction from the containment recirculation sumps. This information is currently documented in the UFSAR, Appendix A, section "Regulatory Guide 1.82". Byron SER, Section 6.2.2 states "The applicant's sump design conforms to the guidelines in Regulatory Guide 1.82 except that the floor in the vicinity of each sump is level and does not slope gradually down away from the sump to assist in preventing heavier debris from accumulating at the sump". Additionally,

another screen was required to be added (this is the existing outer screen) to achieve lower flow velocities.

Thus, compliance with the requirements of Regulatory Guide 1.82 was part of the basis for NRC approval of the Byron/Braidwood design. This compliance resulted in establishing an implicit margin of safety.

The analysis performed in support of this safety evaluation indicates that the change does not result in a discernible reduction in the margin of safety. The debris that would reach the valves through a tortuous path (if it is not pulverized by the RH, SI or CV pumps) is either small and pliable or brittle, and would be swept through the valves. Thus, the design function of the valves is maintained.

The margin of safety is determined by the design and qualification of plant equipment, the operation of the plant within analyzed limits, and the point at which protective actions are initiated. T.S. 3.5.2 addresses "ECCS - Operating" and T.S. .3.5.3 addresses "ECCS - Shutdown." All assumptions made in the bases for these ECCS-related specifications are unaffected by the proposed change to the UFSAR. ECCS pumps remain fully operational, ECCS flow is unaffected, and the resultant accident mitigation consequences and associated margins of safety, specifically the acceptance criteria required by 10 CFR 50.46, are unchanged. There are no design changes or plant equipment performance parameter changes associated with this change. No setpoints are affected, and no change is being proposed to plant operational limits as a result of this change.

Since this change does not result in a discernible reduction in the margin of safety, additional compensatory measures, beyond existing design features and procedural requirements are not needed. As discussed in the body of this evaluation, provisions are in place to control materials taken inside containment and inspections are performed to verify containment and sump cleanliness after outage activities. Additionally, the design of the containment sump and screens exceeds the minimum recommendations given in Regulatory Guide 1.82 Revision 1. Any future physical change, which would result in different type materials added permanently to containment, will be evaluated in accordance with the provisions of 10CFR50.59.

DESIGN CHANGE

D20-2-98-219

DESCRIPTION

The purpose of this Design Change was to increase the design pressure of the discharge piping of each Diesel Fuel Oil (DO) Transfer pump (2DO01PA/PB/PC/PD) from 50 to 60 psig to accommodate the expected relief valve (2DO020A/B/C/D) back pressure of approximately 7.4 psig due to standing fuel in the relief valve tailpipe.

Editorial changes to P&IDs M-130 Sheets 1A and 1B are also incorporated under this Design Change. The symbol for the DO Transfer Pumps was changed from a centrifugal pump symbol to a positive displacement pump symbol to accurately depict the pump type. Lines 2DOE6AA/AB/AC/AD-½" currently point to upstream of valves 2DO128A/B/C/D. These lines are non-safety related and should point downstream of the valves.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because the proposed activity does not change any initiating conditions or events associated with any accident or transient, nor do they change the normal operation of the Diesel Generators (DGs) or DO System. The changes implemented under this Design Change do not adversely affect DG or DO System reliability or availability. The Diesel Generators remain capable of performing their intended safety function as required to mitigate the consequences of the affected accidents and the DO System remains capable of supporting this function.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because the changes do not introduce any new operational limitations for the affected engine subsystem, or do they challenge the availability of the Diesel Generators. All Diesel Generators remain reliable sources of emergency power and no new failure mechanisms are introduced by the changes. The changes will have no impact on equipment failures or malfunctions. The changes do not change any operational or performance characteristics of the Diesel Generators or Diesel Oil System. There are no impacts on interfacing equipment important to safety introduced under these changes. Therefore, these changes cannot introduce or create an accident or malfunction different than previously evaluated.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because this activity does not affect any parameters upon which the Technical Specifications are based.

TECHNICAL REQUIREMENTS MANUAL REVISION

Appendix M

DESCRIPTION

The purpose of this Technical Requirements Manual (TRM) Revision was to revise the Appendix M, "Diesel Fuel Oil Testing Program" to reflect the specific revisions of the ASTM standards that are used to perform the required testing for Diesel Fuel Oil.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because testing requirements and quality specifications for the diesel fuel oil used for the Auxiliary Feedwater (AF) diesel engines and Emergency Diesel Generators (EDG) do not have any impact on the probability of occurrence of any plant accident or transient. Testing diesel fuel oil in accordance with the most recent editions of the applicable ASTM standards will ensure that the quality of the fuel oil is maintained. The EDGs and AF Pumps will thus remain operable in support of plant operation upon a loss of offsite power event.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because the proposed changes will have no impact on equipment failures or malfunctions. The changes to the TRM do not change any operational or performance characteristic of the diesel generators or diesel oil system. There are no impacts on interfacing equipment important to safety introduced under these changes. Therefore, these changes cannot introduce or create a malfunction different than that previously evaluated.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because Technical Specification section 3.7.5 ensures that the AF System will perform its design safety function to mitigate the consequences of accidents that could result in the overpressurization of the reactor coolant pressure boundary. The tests for the fuel oil are a means of assuring the fuel has not been contaminated with substance that would have an immediate impact on diesel engine combustion.

   Technical Specifications 3.8.1 and 3.8.2 ensure that a reliable source of emergence power is available to equipment necessary to mitigate the consequences of abnormal operating occurrences, accidents, or transients. Technical Specification 3.8.3 ensures that the Diesel Oil system is capable of supporting the diesel generators during post-LOCA recovery.

ENGINEERING REQUEST

9501882
9902917

DESCRIPTION

The purpose of this Engineering Request was to install freeze seals on lines 2SXB1AA-3" & 2SX16AA-3" to allow cleaning of 2A Essential Service Water (SX) Pump cubicle cooler.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because the installation of the freeze seals does not change an initiating condition or impact any accidents and transients evaluated in the UFSAR. The added weight of the freeze seal has been evaluated along with flooding concerns and found acceptable. The Essential Service Water System is not a radiological boundary. The freeze seals have the same effect on the plant as closing isolation valves to the 2A SX pump room cubicle and lube oil coolers, which will be Out of Service (OOS).

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because the temporary freeze seal installation does not impact any other plant equipment that could initiate or create an accident different from those evaluated in the UFSAR. The 2A SX Pump will be OOS.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because this activity does not affect any parameters upon which the Technical Specifications are based.

DESIGN CHANGE

D20-0-99-364

DESCRIPTION

The purpose of this Design Change was to modify the operation of the non-safety related Spent Fuel Pool Bridge Crane (SFPBC) to increase the maximum speeds of the bridge and hoist trolleys.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because the changes to increase the maximum speeds are within the design criteria of the equipment. The likelihood of an operator error is not increased because the number of fuel assembly manipulations is not changed; the equipment the operator is using is not change; the interlocks on the equipment are not changed; and the same skills of the operator will be used to avoid/prevent errors.

   The consequences do not increase because these changes do not result in either an increase in the source term for radioactive release; an increase of the amount of fuel damaged; degradation of the radiation detection system; or degradation of the Fuel Handling Building ventilation for the Spent Fuel Pool. Since none of these are affected by these changes, the consequences of the accident are not affected.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because the changes affect the speed of the SFPBC bridge and hoist trolleys, and subsequently, fuel assembly movement. No other functions or safety features of the fuel handling equipment are affected. The equipment is designed to operate, and the fuel assemblies can be moved at the speeds specified in this change and therefore, will remain within their design bases. As such, no new failure modes or malfunctions of the equipment or fuel assemblies are expected.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because this activity does not affect any parameters upon which the Technical Specifications are based.

NUCLEAR WORK REQUEST (NWR)

990127215

DESCRIPTION

The purpose of this Nuclear Work Request was to clean the 2A Centrifugal Charging (CV) Pump cubicle cooler. To perform this work, Door D-227 had to be propped open to allow the routing of hoses. This door is considered a ventilation barrier.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased since the Auxiliary Building will be required to maintain at least -0.3 inches of water during repairs. This will satisfy the requirement for the ECCS pump rooms to maintain a minimum of -0.25 inches of water with respect to outside atmosphere per UFSAR and Technical Specification requirements.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because this work does not have an impact on the events which initiate a Loss of Coolant Accident or a radioactive release accident.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because all Technical Specification and differential pressure requirements were met.

CORE OPERATING LIMITS REPORT REVISION

Unit 1, Cycle 9

DESCRIPTION

The purpose of this Core Operating Limits Report (COLR) Revision was to provide cycle specific data for the remainder of Cycle 9 on Unit 1.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because the COLR changes do not involve an increase in the probability of occurrence of an accident previously evaluated in the safety analysis report. The reload designs have been verified to satisfy the accident analysis limits and assumptions presented in the Byron/Braidwood UFSAR and the subsequent analysis. The COLR changes are not directly related to the probability of any of these previously evaluated accidents, but adhering to applicable design criteria and standards precludes challenges to components and systems that could increase the probability of an accident.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because the COLR changes pose no new equipment or operational challenges upon the plant. All design and performance criteria will continue to be met and no new failure modes or limiting single failure mechanisms have been created nor will the core operate in excess of pertinent design basis operating limits for the key safety parameters. The demonstrated adherence to these standards and criteria precludes new risks to components and systems that could introduce a new type of accident.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because the Technical Specifications and Technical Requirements Manual Limiting Conditions for Operation were reviewed to determine the impact of the COLR change on the acceptance limits/margin of safety. Operation of the cores has been designed to operate within safety analysis acceptance limits and will therefore maintain safety margins.

CORE OPERATING LIMITS REPORT REVISION

Unit 2, Cycle 8

DESCRIPTION

The purpose of this Core Operating Limits Report (COLR) Revision was to provide cycle specific data for the remainder of cycle 8 on Unit 2.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because the COLR changes do not involve an increase in the probability of occurrence of an accident previously evaluated in the safety analysis report. The reload designs have been verified to satisfy the accident analysis limits and assumptions presented in the Byron/Braidwood UFSAR and the subsequent analysis. The COLR changes are not directly related to the probability of any of these previously evaluated accidents, but adhering to applicable design criteria and standards precludes challenges to components and systems that could increase the probability of an accident.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because the COLR changes pose no new equipment or operational challenges upon the plant. All design and performance criteria will continue to be met and no new failure modes or limiting single failure mechanisms have been created nor will the core operate in excess of pertinent design basis operating limits for the key safety parameters. The demonstrated adherence to these standards and criteria precludes new risks to components and systems that could introduce a new type of accident.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because the Technical Specifications and Technical Requirements Manual Limiting Conditions for Operations were reviewed to determine the impact of the COLR change on the acceptance limits/margin of safety. Operation of the cores has been designed to operate within safety analysis acceptance limits and will therefore maintain safety margins.

UFSAR REVISION

UFSAR Draft Revision Package 7-241

DESCRIPTION

The purpose of this UFSAR Revision was to add clarifying information to Section 5.4 to accurately reflect the current status of the Reactor Coolant Pump vibration monitoring system.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because the addition of the clarifying information does not change the design of plant installed equipment. The vibration monitoring system was evaluated and installed under the Station's configuration control program. The addition of clarifying information can not increase the probability or the consequences of an accident or malfunction of equipment important to safety.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because since there are no physical changes to plant equipment. The addition of clarifying text to the UFSAR does not create the possibility of a different type of accident or malfunction.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because this activity does not affect any parameters upon which the Technical Specifications are based.

TEMPORARY MODIFICATION

00-1-004

DESCRIPTION

The purpose of this Temporary Modification (TMOD) was to install a brass gooseneck fitting and temporary pressure switch downstream of the hydraulic fill line valve for 1FW009A. The existing pressure switch is degraded. The leads of the existing pressure switch were lifted and the leads of the temporary switch were landed in their place. This pressure switch provides a start signal to the hydraulic pump on low hydraulic pressure.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because this activity was a like for like replacement of the pressure switch. The Feedwater Isolation Valve still performed all of its design functions. The valve would have closed on all automatic or manual signals. This valve is not an accident initiator and would have closed upon demand.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because this activity was a like for like replacement of the pressure switch. The switch did not affect the ability of the valve to perform its design function. The switch did not affect any other safety related equipment.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because this activity does not affect any parameter upon which the Technical Specifications are based.

NUCLEAR WORK REQUEST (NWR)

990148977

DESCRIPTION

The purpose of this Nuclear Work Request was to clean the Blowdown Mixed Bed Demineralizer (0WX01DA). To perform this work, a floor plug had to be removed to allow the routing of hoses and equipment. This floor plug is considered part of the ventilation boundary.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because removal of the floor plug does not have any impact on the events which initiate a Loss Of Coolant Accident (LOCA). Removal of the floor plug with the administrative controls in place ensures any design base accident remains bounded by the existing off-site dose boundary analysis calculation.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because the affected structure provides a ventilation boundary for Auxiliary Building Ventilation (VA) System. Part of the design requirements for the VA System is to limit environmental conditions in various zones in conformance with requirements. The system controls radioactivity in the areas served by staging the supply air from the clean areas to the areas of greater potential contamination. Plant operation is not changed. No new failure modes are introduced.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because this activity does not affect any parameters upon which the Technical Specifications are based.

NUCLEAR WORK REQUEST (NWR)

990148977

DESCRIPTION

The purpose of this Nuclear Work Request was to clean the Blowdown Mixed Bed Demineralizer (0WX01DC). To perform this work, a floor plug had to be removed to allow the routing of hoses and equipment. This floor plug is considered part of the ventilation boundary.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because removal of the floor plug does not have any impact on the events which initiate a Loss Of Coolant Accident (LOCA). Removal of the floor plug with the administrative controls in place ensures any design base accident remains bounded by the existing off-site dose boundary analysis calculation.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because the affected structure provides a ventilation boundary for Auxiliary Building Ventilation (VA) System. Part of the design requirements for the VA System is to limit environmental conditions in various zones in conformance with requirements. The system controls radioactivity in the areas served by staging the supply air from the clean areas to the areas of greater potential contamination. Plant operation is not changed. No new failure modes are introduced.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because this activity does not affect any parameters upon which the Technical Specifications are based.

NUCLEAR WORK REQUEST (NWR)

970132208

DESCRIPTION

The purpose of this Nuclear Work Request was to isolate the Demineralized Water Makeup System (WM) from the jacket water expansion tank of the 1B and 2B Auxiliary Feedwater (AF) Pump Diesels for the purpose of performing maintenance on the WM Systems.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because the WM System is not designed to be functional during or after a design basis event and therefore no credit is taken for the ability of WM to provide makeup water to the AF diesels during the accident. The water level in the expansion tank will be verified shiftly so that the diesel's jacket water system will always be available to support engine operation. The consequences of a malfunction of an AF diesel is not increased by isolation WM to the diesel's jacket water expansion tank. The failure modes - effects analysis for the AF System contained in UFSAR table 10.4-4 remains valid. The AF System is analyzed for the limiting case of a total loss of one AF Pump.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because although WM is normally aligned to the tank, it is rare that makeup is actually required. The makeup solenoid valve is normally closed (de-energized). When WM is isolated, the solenoid disconnect switch will be placed in the OFF position to prevent the solenoid valve from opening (energizing) on low tank level. There is essentially no impact to the affected systems (AF and WM) associated with this activity.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because this activity does not affect any parameters upon which the Technical Specifications are based.

MODIFICATION TEST

D20-0-00-311-002-01

DESCRIPTION

The purpose of this Modification Test was to verify the new Chemical Feed (CF) house is capable of delivering the required flow rates of Sodium Hypochlorite and Sodium Bromide to the Non-essential Service Water (WS), Circulating Water (CW), and Essential Service Water (SX) Systems.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because the CF System does not initiate or alter the initiating conditions of any accident in the UFSAR. This system is not relied upon to mitigate the consequences of any accident discussed in the UFSAR.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because the portions of the CF System being revised inject into the non-safety CW and WS Systems and the safety related SX System. The injection piping has not been changed and the connection points to these systems are not affected by this change.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because Appendix B to the Braidwood Operating License is the Environmental Protection Plan. All chemicals being used are acceptable and no change to NPDES permit is required. This activity does not affect any parameters upon which the Technical Specifications are based.

MODIFICATION TEST

D20-0-00-311-002-02

DESCRIPTION

The purpose of this Modification Test was to verify the new Chemical Feed (CF) house is capable of delivering the required flow rates of Scale Inhibitor to the Circulating Water (CW) System.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because the CF system does not initiate or alter the initiating conditions of any accident in the UFSAR. This system is not relied upon to mitigate the consequences of any accident discussed in the UFSAR.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because the portions of the CF system being revised inject into the non-safety CW System. The injection piping has not been changed and the connection points to these systems are not affected by this change.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because Appendix B to the Braidwood Operating License is the Environmental Protection Plan. All Chemicals being used are acceptable and no change to NPDES permit is required. This activity does not affect any parameters upon which the Technical Specifications are based.

MODIFICATION TEST

D20-0-00-311-002-03

DESCRIPTION

The purpose of this Modification Test was to verify the new Chemical Feed (CF) house is capable of delivering the required flow rates of Silt Dispersant/Scale Inhibitor to the Non-essential Service Water (WS) and Essential Service Water (SX) Systems.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because the CF system does not initiate or alter the initiating conditions of any accident in the UFSAR. This system is not relied upon to mitigate the consequences of any accident discussed in the UFSAR.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because the portions of the CF system being revised inject into the non-safety WS System and the safety related SX System. The injection piping has not been changed and the connection points to these systems are not affected by this change.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because Appendix B to the Braidwood Operating License is the Environmental Protection Plan. All chemicals being used are acceptable and no change to NPDES permit is required. This activity does not affect any parameters upon which the Technical Specifications are based.

NUCLEAR WORK REQUEST (NWR)

970132208

DESCRIPTION

The purpose of this Nuclear Work Request was to perform grinding work in the Unit 1B Auxiliary Feedwater Pump room. To support this work, Door D-295 had to be propped open to allow the routing of hoses. This door is considered to be part of a ventilation boundary.

SAFETY EVALUATION SUMMARY

1. The probability of an occurrence, or the consequences of an accident, or a malfunction of equipment important to safety, as previously evaluated in the UFSAR, is not increased because propping open door D-295 does not have any impact on the events which initiate a Loss Of Coolant Accident (LOCA). This evaluation for propping open door D-295 ensures any design base accident remains bounded by the existing off-site dose boundary analysis calculation.

2. The possibility of an accident or malfunction of a different type than previously evaluated in the UFSAR is not created because the affected structure provides a ventilation boundary for Auxiliary Building Ventilation (VA) System. Part of the design requirements for the VA System is to limit environmental conditions in various zones in conformance with requirements. The system controls radioactivity in the areas served by staging the supply air from the clean areas to the areas of greater potential contamination. Plant operation is not changed. No new failure modes are introduced.

3. The margin of safety, as defined in the Bases of the Technical Specifications, is not reduced because this activity does not affect any parameters upon which the Technical Specifications are based.