

WOLF CREEK

NUCLEAR OPERATING CORPORATION

Bart D. Withers
President and
Chief Executive Officer

March 10, 1992

WM 92-0037

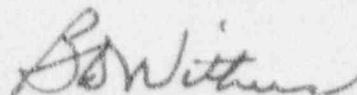
U. S. Nuclear Regulatory Commission
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Washington, D. C. 20555

Subject: Docket No. 50-482: Wolf Creek Generating Station Annual
Safety Evaluation Report

Gentlemen:

Attached is the Annual Safety Evaluation Report for Wolf Creek Generating Station which is being submitted pursuant to 10 CFR 50.59(b)(2). This report covers the period of January 1, 1991, to December 31, 1991.

Very truly yours,



Bart D. Withers
President and
Chief Executive Officer

BIW/jra

Attachment

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WOLF CREEK NUCLEAR OPERATING CORPORATION

Wolf Creek Generating Station

Docket No: 50-482
Facility Operating License No: NPF-42

ANNUAL SAFETY EVALUATION REPORT

Report No: 7

Reporting Period: January 1, 1991 through December 31, 1991

Prepared by: Steve Wideman

Approved by:


Otto L. Maynard
Director Plant Operations

Executive Summary

The purpose of this report is to provide a brief description of changes, tests, and experiments performed at Wolf Creek Generating Station pursuant to 10 CFR 50.59(a)(1). This report includes summaries of the associated safety evaluations that were reviewed and found to be acceptable by the Plant Safety Review Committee for the period beginning January 1, 1991 and ending December 31, 1991. This report is submitted in accordance with the requirements of 10 CFR 50.59(b)(2).

A change to the safety evaluation tracking process occurred approximately mid-year. This change involved sequential numbering of all safety evaluations upon initiation. However, because this process was not initiated until mid-year, many evaluations were not assigned a sequential number and are therefore divided into three major categories.

Section I contains the Plant Modification Requests which were initiated prior to mid-year. These are the primary vehicle used for permanent plant modifications and design drawing revisions. Section II contains Safety Evaluations primarily used for temporary plant modifications, procedure revisions and temporary procedures. Also included in this section are the safety evaluations assigned a sequential number under the new process. The type of change the evaluation is applicable to is denoted in the title. Section III contains the summaries of the remaining safety evaluations, initiated prior to mid-year, utilizing various programs including Corrective Work Request Dispositions and Updated Safety Analysis Report (USAR) Change Requests.

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Section I

PLANT MODIFICATION REQUEST: 00772 Revision: 5

Reactor Vessel Head Stud Storage Rack Restraint

Description:

This modification provides for permanent restraint of the reactor vessel head stud storage racks by adding members to support the storage racks when in Mode 6, Refueling, where the studs are in the rack and the floor load is near seven thousand pounds per rack. There are vertical structural members attached to the floor which extend up into the storage racks to provide for seismic restraint of the storage assembly.

Safety Evaluation:

The addition of the seismic restraints and floor supports eliminates the potential of the racks falling through the grating directly onto the incore instrumentation seal tables, potentially causing a small break Loss Of Coolant Accident (LOCA). Additionally, the potential of the racks falling on the electric power supply to the reactor head vent valves has been eliminated.

There is no increase in the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the USAR. This is because the design change adds seismic restraints for the storage racks and supplemental structural steel to the decking at 2068' elevation. In addition, the storage is remotely located with respect to the reactor head and controls.

This design modification improves the structural support of the reactor vessel head stud storage racks. The improvement in the design reduces any probability of a II/I failure or subsequent propagation of facility accident as defined in USAR. There is no possibility that an accident or malfunction of equipment important to safety of a different type than any evaluated previously in the USAR may be created.

The margin of safety as defined in the basis for any Technical Specification is not reduced.

PLANT MODIFICATION REQUEST: 00830 Revision: 1

Failed Fuel Radiation Monitor Sample Volume Reduction

Description:

Chemical & Volume Control System (CVCS) Letdown Radiation Monitor SJ-RE-01 acts as a gross failed fuel detector by continuously monitoring the CVCS letdown sample line and providing an alarm upon the presence of an abnormal increase in gross gamma activity. This is a modification of the detector sensitivity that involves a reduction in sample volume and a setting change for the discriminator to enable the unit to detect only failed fuel products and disregard other high energy reactor coolant system by-products.

Safety Evaluation:

This monitor is non-safety related and provides no control function. It provides an alarm only upon an abnormal increase in the gross gamma activity in the CVCS letdown system and does not activate nor interface with any safety related system, component or structure. There is no increase in the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the USAR.

This modification does not alter the seismic, environmental or equipment qualification of any system, component or structure. There is no possibility that an accident or malfunction of equipment important to safety of a different type than any evaluated previously in the USAR may be created.

The margin of safety as defined in the basis for any Technical Specification is not reduced.

PLANT MODIFICATION REQUEST: 00870 Revision: 4

Pump Gland Supply Water Modification

Description:

This modification installs a cyclone separator in the Circulating Water Pump House to supply clean supply water to the circulation and service water pump glands. Previously, water supplied to these pump glands also supplied an emergency shower and eyewash station. A potable water connection now supplies water to the emergency shower and eyewash station and the original supply pumps are no longer used.

Safety Evaluation:

The Gland Water and Potable Water System do not perform any safety related function or provide support for any equipment important to safety. There is no increase in the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the USAR.

Since the modification is located away from any safety related equipment and not physically connected to any supporting systems, there is no possibility that an accident or malfunction of equipment important to safety of a different type than any evaluated previously in the USAR may be created.

The margin of safety as defined in the basis for any Technical Specification is not reduced.

PLANT MODIFICATION REQUEST: 01006 Revision: 3, 4

Demineralized Water Make-up Storage and Transfer Degasifier Vacuum Pump Oil Mist Eliminator Modification

Description:

Revision 0 to this modification provided for a high efficiency oil mist eliminator on the demineralized water make-up storage and transfer degasifier vacuum pump discharge. Revisions 3 and 4 provide for the elimination of the loop seals on the lines off the oil mist eliminator and for permanent drainage piping from the second stage drainage valve to the oily waste drain.

Safety Evaluation:

The Demineralized Water Storage and Transfer System serves no safety function and has no safety design basis. These changes do not increase the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the USAR.

These changes involve only a non-safety related system and do not affect any safety related equipment. There is no possibility that an accident or malfunction of equipment important to safety of a different type than any evaluated previously in the USAR may be created.

The margin of safety as defined in the basis for any Technical Specification is not reduced.

PLANT MODIFICATION REQUEST: 01184 Revision: 2

Auxiliary/Fuel Building Normal Exhaust System Modification

Description:

Various areas serviced by the Auxiliary/Fuel Building Normal Exhaust System were identified as having less than design flow values. This revision modifies the fan/motor system of the Auxiliary/Fuel Building Normal Exhaust System to increase the horsepower and operating speed of the fans, CGL03A & B. Not all of the modification documents and affected documents are issued with this revision, these will be included in later revisions.

A change to the USAR is involved with this modification to reflect the increase in the horsepower of the drive motor to the exhaust fans. The safety evaluation will be revised when the fan base modification documents are issued to account for the additional weight that the modification will impose to the Auxiliary Building floor slab.

Safety Evaluation:

The new components installed by this modification are compatible to the original components in function and operation. Therefore, there is no increase in the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the USAR.

There is no possibility that an accident or malfunction of equipment important to safety of a different type than any evaluated previously in the USAR may be created.

The function and operation of the Auxiliary Building Normal Exhaust System is not addressed in the Technical Specifications and therefore does not reduce the margin of safety as defined in basis for any Technical Specification.

PLANT MODIFICATION REQUEST: 01479 Revision: 0,1,1

Safety Parameter Display System Data Transfer Optimization

Description:

Deficiencies have been identified in the Wolf Creek Generating Station Safety Parameter Display System (SPDS) during plant transient events. The primary deficiencies are attributed to significant delays and periodic failures in the transfer of data from data sources to SPDS displays.

This modification replaces the internals of all ten Balance Of Plant (BOP) Honeywell Input/Output (I/O) cabinets, the Nuclear Steam Supply System (NSSS) Westinghouse I/O cabinets and the Annunciator Multiplexer Riley Internals. Other additions include establishment of a fiber optic communications link between each of the I/O cabinets of the main processing host computers in the Technical Support Center Computer Room, a link between the plant computer and the plant simulator, and the development of SPDS software in-house.

This modification also includes two new penetrations in the Control Room Shift Supervisor's office floor. The design for the new penetrations includes closure details to maintain boundary separation for fire, water and airborne hazards to the same levels as the original design basis.

Safety Evaluation:

The subject modification does not adversely affect any safety related system, component or structure. It meets all applicable installation requirements for electrical and civil/structure codes and standards. All penetrations required by this modification are sealed per established procedures. There is no increase in the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the USAR.

This modification does not present modifications to any piping system, nor does it affect any previous hazard analysis. There is no possibility that an accident or malfunction of equipment important to safety of a different type than any evaluated previously in the USAR may be created.

The margin of safety as defined in the basis for any Technical Specification is not reduced.

PLANT MODIFICATION REQUEST: 01572 Revision: 1

Hot Tool Room Modification

Description:

This modification involves analysis of the Hot Tool Room location and its use-as-built. The area reserved for the Hot Tool Room was checked for the possibility of blocking fire exits and limiting the accessibility of portable fire extinguishers. The results of this review indicated that no obstructions existed. The area had also been reviewed for other design interfaces and it was determined that the area is not within any II/I boundaries and does not adversely affect any safety related components provided expansion anchors were installed in accordance with specifications.

Revision 1 was initiated to change the safety classification to safety related because the anchor bolt installation to the Auxiliary Building floor requires a safety related plant modification.

Safety Evaluation:

The location of the Hot Tool Room does not create an obstruction that might block fire exits or limit the accessibility of portable fire extinguishers. The area is not within any II/I boundaries and does not affect any safety related equipment. Installation of the anchor bolts to the Auxiliary Building floor does not change the floor's design characteristics. There is no increase in the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the USAR.

The installation of the anchor bolts is a common activity in the Auxiliary Building and has been previously evaluated. There is no possibility that an accident or malfunction of equipment important to safety of a different type than any evaluated previously in the USAR may be created.

The margin of safety as defined in the basis for any Technical Specification is not reduced.

PLANT MODIFICATION REQUEST: 01727 Revision: 1, 2

Post Accident Sampling System Valve Modification

Description:

This modification provides the addition of 3 control boxes and the necessary cable routing and termination changes for solenoid operated containment isolation valves SJ HV005, SJ HV006 and SJ HV127 in the Post Accident Sampling System (PASS). This modification results from the replacement of these valves with later model valves. These valves are provided with an external control box with a heat dissipating resistor. The resistor is used to reduce the continuous current to the valve solenoid so that it operates at a reduced temperature.

Safety Evaluation:

The effect of the addition of the new control boxes is solely to reduce the continuous current supplied to each valve solenoid. This reduces the heat produced by the solenoid winding, thus extending its qualified life. The modification does not adversely affect any existing accident or hazard analysis. There is no increase in the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the USAR.

The modification does not adversely affect any equipment important to safety. There is no possibility that an accident or malfunction of equipment important to safety of a different type than any evaluated previously in the USAR may be created.

The margin of safety as defined in the basis for any Technical Specification is not reduced.

PLANT MODIFICATION REQUEST: 01 Revision: 3

Domestic Hot Water Heater Steam Control And Health Physics Electric Hot
Water Heater Addition Modification

Description:

During a field walkdown for design changes involved in this modification, a bypass valve was found in the field but not depicted on its associated piping and instrumentation diagram (P&ID). The P&ID is found in the USAR, therefore this safety evaluation was initiated as a result of the revision to the P&ID. There are no hardware changes to the plant and this drawing change has no effect on the operation of the system.

Safety Evaluation:

This is a drawing change only. There is no increase in the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the USAR.

The proposed change is a drawing change to identify a valve in the field that is not depicted on the appropriate drawing. This drawing change does not have the possibility of creating an accident or malfunction of equipment important to safety of a different type than any evaluated previously in the USAR.

There are no margins of safety associated with this drawing change. Therefore, the margin of safety as defined in the basis for any Technical Specification is not reduced.

PLANT MODIFICATION REQUEST: 01829 Revision: 3

Turbine Building Ammonium Hydroxide Storage

Description:

This modification provides for the storage of ammonium hydroxide in the Turbine Building. A permanent, air conditioned storage room is provided to store unopened leak-tight ammonium hydroxide drums. The purpose of the storage room inside the Turbine Building is to provide an environment cool enough for the ammonium hydroxide so that off-gassing does not occur. Off-gassing is required to be minimized to eliminate a potential personnel hazard.

Safety Evaluation:

This modification does not involve changes to the safety design bases for any system. The subject modification will not adversely affect the operation or function of any safety related system, structure, or component including the diesel generators. Therefore, the probability of occurrence of malfunctions of equipment important to safety previously evaluated in the USAR will not be increased. Calculations addressing an ammonium hydroxide accident on Control Room habitability determined that Control Room Operators would still have sufficient time to don their full faced self-contained breathing apparatuses. There is no increase in the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the USAR.

Release of ammonium hydroxide from its new storage location will not adversely affect the Control Room or any other safety related equipment including the diesel generators (e.g. through ingestion of gas via air intakes). Therefore, there is no possibility that an accident or malfunction of equipment important to safety of a different type than any evaluated previously in the USAR may be created.

No safety system, structure, or component has been adversely affected by this modification. The margin of safety as defined in the basis for any Technical Specification is not reduced.

PLANT MODIFICATION REQUEST: 0.254 Revision: 6

Diesel Generator Room Door Replacement

Description:

This modification replaces Diesel Generator Room Doors 33021 and 3302 and changes their swing to open to the inside of the Diesel Generator Rooms. The door swing change aids in closing the doors and maintains a tight air seal because of the constant outward airflow. The door swing change constitutes a change to the USAR.

Safety Evaluation:

The safe operation of the systems is not adversely affected by the changes. Therefore, there is no increase in the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the USAR.

There is no possibility that an accident or malfunction of equipment important to safety of a different type than any evaluated previously in the USAR may be created.

The changes performed do not affect plant conditions and systems as referenced in the USAR for postulated accidents. Therefore, the margin of safety as defined in the bases for any Technical Specification is not reduced.

PLANT MODIFICATION REQUEST: 02495 Revision: 4

Service Air Compressor And Dryer Replacement

Description:

This revision to the modification provides for the replacement of the Ingersoll-Rand Reciprocating Air Compressor CKA01A with an Atlas Copco ZR4-C1 rotary screw air compressor. It also replaces the existing Kemp Air Dryer Skid with a Pneumatic PN-1200 dual air dryer skid. A cooling water booster pump is added and the carbon steel cooling water inlet and outlet piping near the compressor is replaced with stainless steel piping.

Safety Evaluation:

The fail-safe nature of the safety related system instrumentation is not affected by this modification. The necessary pressure protection is maintained. There is no increase in the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the USAR.

Failure of the booster pump is not discussed in the USAR. But, its net impact is no different than loss of coolant to the air compressor. There is no possibility that an accident or malfunction of equipment important to safety of a different type than any evaluated previously in the USAR may be created.

The Technical Specifications do not directly address the Service Air System. Based on the fail-safe design of the interfacing plant control systems and the Service Air System enhancements provided by this modification, there is no reduction in the margin of safety as defined by the basis for any Technical Specification.

PLANT MODIFICATION REQUEST: 02782 Revision: 0

Heating Coil Vent Replacement

Description:

The heating coil vent valve assembly on the heating coil outlet of Computer Room Fan Coil Unit SGE01B had broken off at its root. The subject modification replaces this assembly with 3/8-inch copper tubing and a ball valve labelled GE V075. The replacement valve has been reviewed and meets the material and quality code requirements applicable to the original valves in the heating coil. The replacement valves weigh less than the originals and will function under the system temperature and pressure. Because of the valve number change, a USAR change is necessary.

Safety Evaluation:

Since this modification replaces an existing valve with a valve that meets all code and design requirement applicable to the original design, there is no increase in the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the USAR.

The replacement valve meets the applicable codes and standards and is designed to operate under the system temperature and pressure. There is no possibility that an accident or malfunction of equipment important to safety of a different type than any evaluated previously in the USAR may be created.

There are no margins of safety associated with this modification, therefore the margin of safety as defined in the basis for any Technical Specification is not reduced.

PLANT MODIFICATION REQUEST: 02867 Revision: 0

Process Sampling pH Analyzer And Flow Cell Replacement

Description:

This modification replaces the existing pH analyzers and flow cells/electrodes in the process sampling panels 171 and 172 with new pH analyzers and flow cells/electrodes which are more reliable. Pressure regulators and indicators are also being added to each sample line in order to meet sampling requirements of the new flow cell/electrodes. The associated recorder which provides local indication and alarm only, is located in panel 171 and is being modified to accept the input from the new analyzers. The panels are non-Q, non-class IE and serve no safety function.

Safety Evaluation:

The Process Sampling System pH monitoring serves no safety function. Failure modes associated with the affected equipment does not adversely impact any safety related structures, systems, or components. There is no increase in the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the USAR.

This modification only replaces existing pH monitoring equipment in the Process Sampling System with more reliable equipment. The equipment will perform the same design function as that originally installed. There is no possibility that an accident or malfunction of equipment important to safety of a different type than any evaluated previously in the USAR may be created.

This modification enhances the performance of the pH monitoring system. The margin of safety as defined in the basis for any Technical Specification is not reduced.

PLANT MODIFICATION REQUEST: 02946 Revision: 0

Feedwater Preheating Modification:

Description:

This modification provides additional preheating of the feedwater during startup by tapping the Main Steam System upstream of Main Steam Dump Valves AB UV0034 and AB UV0035 to provide additional steam for preheating feedwater in Feedwater Heaters 6A & B and 7A & B during power ascension at low loads. This modification eliminates the potential for the steam generator nozzles to be over-stressed due to temperature transients and improves steam generator level stability thereby reducing unnecessary reactor trips that challenge safety systems.

Safety Evaluation:

This non-safety related modification does not increase the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the USAR.

This modification is bounded by the Limiting Fault Analysis for the Steam System Piping Failure (major) and the Feedwater System Pipe Break. There is no possibility that an accident or malfunction of equipment important to safety of a different type than any evaluated previously in the USAR may be created.

The margin of safety as defined in the basis for any Technical Specification is not reduced.

PLANT MODIFICATION REQUEST: 03015 Revision: 2

Turbine Vibration Monitoring System Replacement

Description:

This modification consists of replacing the turbine vibration sensors and monitoring equipment with a new system that is integrated with the Turbine Supervisory Instrument (TSI) system, thereby using its trip circuitry.

Safety Evaluation:

The TSI system is non-safety related. This modification does not affect any equipment important to safety. There is no increase in the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the USAR.

The new system performs the same functions of the previous system while adding redundancy and reliability to the TSI system. There is no possibility that an accident or malfunction of equipment important to safety of a different type than any evaluated previously in the USAR may be created.

The margin of safety as defined in the basis for any Technical Specification is not reduced.

PLANT MODIFICATION REQUEST: 03043 Revision: 0

Diesel Generator Jacket Water Thermostat Reset

Description:

This modification provides a change to the diesel generator jacket water keepwarm thermostat reset value indicated on a related drawing. During review of the USAR a typographical error and a misleading statement were identified. The USAR changes, resulting from this modification, are merely corrections and do not reflect design changes.

Safety Evaluation:

The two affected sections of the USAR contain discrepancies due to a typographical error and to a misleading statement in the diesel generator instruction manual. The required USAR changes are corrections only and do not represent any type of change to the design.

There is no increase in the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety of a different type than any evaluated previously in the USAR may be created.

There is no possibility that an accident or malfunction of equipment important to safety of a different type than any evaluated previously in the USAR may be created.

The margin of safety as defined in the basis for any Technical Specification is not reduced.

PLANT MODIFICATION REQUEST: 03095 Revision: 0

Low Pressurizer Pressure Reactor Trip Setpoint Documentation Change

Description:

A Technical Specification amendment has been completed to provide for a 2 percent reduction in the thermal design flow, and a maximum average steam generator tube plugging level of 4 percent, not to exceed 4 percent in any single steam generator for WCGS. To ensure protection of the vessel exit boiling limits at lower pressures, the low pressurizer pressure reactor trip setpoint safety analysis limit was raised from 1860 pounds per square inch absolute (psia) to 1900 psia. This modification revises the documentation affected by the setpoint change.

Safety Evaluation:

The reduction in the thermal design flow and the steam generator tube plugging level does not affect any mechanisms postulated in the USAR to cause Loss of Coolant Accident (LOCA) or non-LOCA design basis events. The adjustment of the low pressurizer pressure reactor trip bistables does not adversely alter the function or performance characteristics of any instrumentation or equipment. There is no increase in the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the USAR.

The changes do not alter the plant configuration in a way that introduces a new potential hazard to the plant. There is no possibility that an accident or malfunction of equipment important to safety of a different type than any evaluated previously in the USAR may be created.

All applicable safety analysis acceptance criteria continue to be met for the reduced thermal design flow and steam generator plugging level. The margin of safety as defined in the basis for any Technical Specification is not reduced.

PLANT MODIFICATION REQUEST: 03133 Revision: 0

Resistance Temperature Detector Bypass Elimination

Description:

This modification involves removal of the existing Resistance Temperature Detector (RTD) bypass lines and replacement of the existing RTDs with thermowell RTDs. Three dual element RTDs are used for each hot leg, these are located in the existing scoops. One dual element thermowell RTD is located in the existing cold leg penetration. The nozzles in the crossover legs for the return lines are no longer needed, and thus are capped. This modification is desirable in order to increase plant availability and reliability due to the removal of several valves that have been the source of leakage inside containment and to reduce long term man-hour expenses and man-rem exposure in the RTD bypass loop area when completing Inservice Inspections and other maintenance activities.

Safety Evaluation:

The functions that utilize temperature input from the original RTDs are not affected by their removal and replacement because the signals derived from the replacements are equivalent to those provided by the original RTDs. The input to the rod control system and steam dump control system from the replacement RTDs are equivalent to that currently provided by the original RTDs. There is no increase in the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the USAR.

These changes are performed in a manner consistent with applicable standards, preserve the existing design bases, and do not adversely impact the qualification of any plant systems. The consequences of a missile due to the postulated ejection of a thermowell have been reviewed and determined to be bound by the current small break loss of coolant accident analysis. There is no possibility that an accident or malfunction of equipment important to safety of a different type than any evaluated previously in the USAR may be created.

The margin of safety as defined in the basis for any Technical Specification is not reduced since the current USAR analyses remain bounding.

PLANT MODIFICATION REQUEST: 03142 Revision: 0

Residual Heat Removal Permanent Pressure Indicator Addition

Description:

This modification provides for the addition of permanent differential pressure (DP) flow indicators across existing orifices in the Residual Heat Removal (RHR) System. This provides for permanent local indication of RHR System flow and a more convenient manner in which to conduct flow testing.

Safety Evaluation:

The addition of the seismically designed flow indicators provides local indication of RHR System flow. Because they are seismically designed, their only possible failure mode is the loss of their indication function. Since this function of indication satisfies no safety requirement, such a failure would have no safety impact on the RHR System or any other system, component or structure. There is no increase in the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the USAR.

The design changes do not alter the seismic, environmental or equipment qualification of any system, component or structure. There is no possibility that an accident or malfunction of equipment important to safety of a different type than any evaluated previously in the USAR may be created.

The margin of safety as defined in the basis for any Technical Specification is not reduced.

PLANT MODIFICATION REQUEST: 03184 Revision: 0

Public Address System Addition

Description:

This modification provides for the addition of 3 speakers and 1 amplifier to the Plant Public Address System. These items are being added in the Auxiliary Building and in the Communication Corridor to provide improved public address coverage in these areas.

Safety Evaluation:

This modification affects only plant communications. This system does not serve a safety related function and is not evaluated in the USAR for any accident condition. Therefore, there is no increase in the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the USAR.

There is no possibility that an accident or malfunction of equipment important to safety of a different type than any evaluated previously in the USAR may be created.

The margin of safety as defined in the basis for any Technical Specification is not reduced.

PLANT MODIFICATION REQUEST: 03190 Revision: 0

Floor Drain Valve Installation

Description:

This modification provides for the installation of 4-inch water check valves in each of the three floor drains in the Auxiliary Building Corridor (North) which exhibit positive air flow characteristics. This positive air flow allows the distribution of airborne radioactive contaminants into areas of the plant/corridor considered to be accessible during normal plant operations.

Safety Evaluation:

This modification installs three check valves in the Floor and Equipment Drain System to the same design requirements as the original design requirements for structural integrity and drainage capacity. Also, the affected floor drains do not perform a safety related function. Therefore, there is no increase in the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the USAR.

There is no possibility that an accident or malfunction of equipment important to safety of a different type than any evaluated previously in the USAR may be created.

The margin of safety as defined in the basis for any Technical Specification is not reduced.

PLANT MODIFICATION REQUEST: 03216 Revision: 0

Main Steam System Steam Trap Changeout

Description:

This modification is in the non-safety related Main Steam System (AS). The modification involves changes to the material of steam traps AS ST005, 006, 007 & 008, and piping components immediately downstream of them, from carbon steel to Chrome-Moly steel. Chrome-Moly steel is the selected replacement material because it has a higher resistance to erosion/corrosion than carbon steel. The Chrome-Moly steel material also maintains the system's original design structure and functional integrity.

The modification involves a change to the USAR to reflect the change in pipe material.

Safety Evaluation:

This modification does not adversely affect the system function, operation, structural integrity, or reliability. The piping being modified performs no safety related function. There is no increase in the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the USAR.

This modification does not affect any seismic, environmental, or equipment qualifications of any system, component, or structure. There is no possibility that an accident or malfunction of equipment important to safety of a different type than any evaluated previously in the USAR may be created.

The margin of safety as defined in the basis for any Technical Specification is not reduced.

PLANT MODIFICATION REQUEST: 03280 Revision: 0

Component Cooling Water To Reactor Coolant Pump Thermal Barrier Check
Valve Replacement

Description:

This modification replaces each 3-inch Component Cooling Water (CCW) to Reactor Coolant Pump (RCP) thermal barrier check valves with two 1.5-inch check valves. Test connections are added upstream and downstream of each check valve to facilitate testing of the valves. The modification requires relocation of a fire hose station, a portable fire extinguisher, a pull station, and a gaitronics station.

The increase in system pressure drop due to the modification has been evaluated and found to be acceptable. The required CCW flow to the RCP thermal barriers is maintained with the modification.

Safety Evaluation:

The valves and their associated piping are in safety related systems (the Reactor Coolant System and the CCW System). This modification does not adversely affect the systems' function or operation, structural integrity, reliability, or regulatory commitments. The modification will 1) improve the CCW System function/operation by reducing the valve size and therefore ensuring full disc lift, and 2) improve the ability of the CCW System to withstand a RCP thermal barrier rupture by adding double isolation valves.

The fire protection review performed for this modification indicated that relocation of a fire hose station, a portable fire extinguisher, and a pull station does not affect the previous fire protection analysis. The National Fire Protection Agency requirements for location of the above fire equipment is by general area, and this area is maintained with this modification.

The new check valves are seismically and environmentally qualified to the same requirements of the existing check valves. There is no increase in the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the USAR.

This modification does not affect any seismic, environmental or equipment qualifications of any other system, component or structure. There is no possibility that an accident or malfunction of equipment important to safety of a different type than any evaluated previously in the USAR may be created.

The margin of safety as defined in the Basis for any Technical Specification is not reduced.

PLANT MODIFICATION REQUEST: 03281 Revision: 0

Main Turbine Control Oil System Piping and Instrument Drawing Modification

Description:

This modification provides for the creation of Piping & Instrumentation Drawings (P&ID) for the Main Turbine Electro-Hydraulic Control Oil System, also known as the Main Turbine Control Oil (CH) System, to represent the as-built conditions of the system. This system supplies high pressure fire resistant hydraulic fluid for controlling the turbine.

The only systems associated with this change are the CH System and the Closed Cooling Water (EB) System. The CH System and the affected portion of the EB system are located in the Turbine Building. Both systems are non-safety related. The change consists of a documentation change only, adding two new P&IDs, which had previously been depicted only on vendor documents. No plant modifications are associated with this design change.

Safety Evaluation:

This modification does not affect any hazards analyses or any environmental, seismic, or equipment qualifications of any system, component or structure. There is no increase in the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the USAR.

There is no possibility that an accident or malfunction of equipment important to safety of a different type than any evaluated previously in the USAR may be created.

The EB and CH systems are not addressed in the Technical Specifications. The margin of safety as defined in the basis for any Technical Specification is not reduced.

PLANT MODIFICATION REQUEST: 03313 Revision: 0

Reactor Head Cable Tray Cover Attachment

Description:

This modification provides for an alternate method to attach tray covers to selected trays which extend outward to the reactor head that require frequent rework. The modification allows the attachment of tray covers using a locking latch/strike assembly in lieu of standard attachment methods. The latch and strike are permanently attached to the tray and tray cover respectively. The design requires that applicable galvanized surfaces be repaired during latch assembly installation with a suitable coating to reinstate the original protective coating on the tray. All other attributes of the original tray cover installation remain unchanged.

Safety Evaluation:

Both the latch assembly and strike have been evaluated with respect to the peak seismic acceleration of the trays and have been found acceptable. The latch and strike are of small unit weight and therefore do not significantly change the response of the trays from that as presently installed. The modification to the tray system with regard to the drilling of holes in the tray siderails and covers to facilitate rivet installation results in no significant loss of strength to either component.

The design changes provided by this modification do not alter or adversely impact any bases for the tray system, or any other system, structure or component, including seismic qualification of the tray. There is no increase in the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the USAR.

No II/I hazard is created nor is there addition of any combustible material. There is no possibility that an accident or malfunction of equipment important to safety of a different type than any evaluated previously in the USAR may be created.

The margin of safety as defined in the basis for any Technical Specification is not reduced.

PLANT MODIFICATION REQUEST: 03345 Revision: 1

Essential Service Water Permanent Pressure Indicator Addition

Description:

This modification provides for the addition of permanent Pressure Indicators EF P1-109 and EF PJ-110 in the Essential Service Water (ESW) return lines to the Service Water (SW) System and differential pressure indicators EF PDI-111 and EF PDI-112 across the ESW supply and return lines to the SW System. These indicators, located in the Control Building, will provide for permanent local indication of ESW pressure at the return lines.

Safety Evaluation:

The addition of the four seismically designed pressure and differential pressure indicators provides local indication of ESW pressure at the supply and return lines to the SW System. Because they are seismically designed, their only possible failure mode is the loss of their indication function. Since this function of indication satisfies no safety requirements, such a failure would have no safety impact on the ESW System or any other system, component or structure. Therefore, there is no increase in the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the USAR.

The design changes do not alter the seismic, environmental or equipment qualification of any system, component or structure. There is no possibility that an accident or malfunction of equipment important to safety of a different type than any evaluated previously in the USAR may be created.

The margin of safety as defined in the basis for any Technical Specification is not reduced.

PLANT MODIFICATION REQUEST: 03361 Revision: 1

Bolted Ring Tongue Lug And Butt Splice Method Allowance

Description:

This modification revises the repair section of an electrical equipment cable detail drawing to allow the use of a bolted ring tongue lug with a compression type ring tongue, either a pad type terminal with one hole or two holes or a noninsulated YSV Type Bundy Butt Splice with WCSF-N Type Raychem Insulation. The bolted ring tongue lug or butt splice is designed to allow repair of the existing cable/wire conductor in lieu of replacement.

Safety Evaluation:

The addition of the subject splices will prevent the possibility for damage being caused while routing new cable. In addition, the added conductor resistance, provided by these splicing methods, is considered insignificant (no significant current restriction); and the insulation resistance of WCSF-N Type Raychem Insulation has been tested and qualified for use in a harsh environment. Therefore, the use of the subject splices does not jeopardize the function of the affected cable/wire conductor.

The safety related function of the affected cable/wire conductors is to provide safety related power to safety related loads. As stated above, no significant failure potential has been added to the cable/wire conductor by use of the bolted ring tongue lug or butt splice, thus no significant failure potential in the function of any associated safety related equipment has been induced. Therefore, the probability of occurrence and the consequences of an accident or malfunction of equipment important to safety has not been increased.

The possibility of an accident or malfunction of equipment important to safety of a different type than previously evaluated in the USAR has not been created.

There is no reduction in the margin of safety as defined in the basis for any Technical Specification.

PLANT MODIFICATION REQUEST: 03364 Revision: 1

Stop Valve Component Replacement

Description:

This modification provides for the use of an updated mode of the before seal drain valves for the stop valves in the high pressure turbine steam supply lines. The original valves are no longer available and two require replacement. The replacement valves meet material and quality code requirements applicable to the original design and function.

Safety Evaluation:

This modification complies with the same codes, standards, and design requirements applicable to the original design. There is no increase in the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the USAR.

Since the replacement valves have greater weight than the original valves, changes to the pipe support configuration are included with this modification. The new pipe support configuration also meets all code and design requirements applicable to the original design. There is no possibility that an accident or malfunction of equipment important to safety of a different type than any evaluated previously in the USAR may be created.

There are no margins of safety associated with the changes identified in this modification. Therefore, the margin of safety as defined in the basis for any Technical Specification is not reduced.

PLANT MODIFICATION REQUEST: 03383 Revision: 0

Safety Injection Pump Strainer Flange And Spacer Removal

Description:

Because of leakage, the safety injection pump start-up strainer flanges and spacers are being removed. The strainer flanges no longer serve a design purpose and their removal and replacement with a single length of pipe connected to the pump suction flange resolves the leakage problem.

Safety Evaluation:

This modification does not affect the seismic evaluation of the subject piping nor affect the structural integrity of the pressure boundary. There is no increase in the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the USAR.

No new failure modes are created by this modification. There is no possibility that an accident or malfunction of equipment important to safety of a different type than any evaluated previously in the USAR may be created.

System functions and design parameters remain unchanged. The margin of safety as defined in the basis for any Technical Specification is not reduced.

PLANT MODIFICATION REQUEST: 03390 Revision: 0

Chemical And Volume Control System Snubber Elimination

Description:

This modification eliminates small snubbers in the Chemical and Volume Control System (CVCS) which are more vulnerable to damage as a result of sudden dynamic forces and/or are located in a high radiation area and therefore do not have easy access for inspections. This considerably reduces the cost of repair, maintenance and inspection.

Safety Evaluation:

A seismic stress analysis is performed to determine any effect on the existing piping, supports, valves, equipment nozzles and other related components. All existing pipe supports and spring hangers are capable of carrying the revised loads and no hardware change is required except elimination of snubbers. Valve acceleration and equipment nozzle loads are within allowable range. There are no changes in pipe break locations and snubber inspection criteria.

The function of piping, supports, valves, equipment nozzles, and other related components is not adversely affected by this change. Therefore, there is no increase in the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the USAR.

There is no possibility that an accident or malfunction of equipment important to safety of a different type than any evaluated previously in the USAR may be created.

The margin of safety as defined in the basis for any Technical Specification is not reduced.

PLANT MODIFICATION REQUEST: 03399 Revision: 0

Shop Building Water Heater Drawing Change

Description:

This modification provides a drawing change to show an existing 3-inch globe valve on the hot water supply line for the Shop Building water heater.

Safety Evaluation:

There are no hardware changes to the plant. This change has no effect on the operation of any system or component. Therefore, there is no increase in the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the USAR.

There is no possibility that an accident or malfunction of equipment important to safety of a different type than any evaluated previously in the USAR may be created.

The margin of safety as defined in the basis for any Technical Specification is not reduced.

PLANT MODIFICATION REQUEST: 03405 Revision: 0

Chemical Addition Skid Berm Addition

Description:

This modification involves welding a 3-4 inch high berm around the base of the chemical addition auxiliary boiler skid, drilling holes in the bottom of the skid to allow drainage to the chemical drain system, welding a drain line to the bottom of the skid around the holes and routing the line to the floor drain.

Safety Evaluation:

This modification provides for directing an accidental chemical spill to the proper drain, thus reducing the probability of personnel injury and equipment damage. The chemical addition skid and the floor drain that a chemical spill is directed to do not serve a safety related function. There is no increase in the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the USAR.

This modification does not affect any safe shutdown components, equipment or systems. There is no possibility that an accident or malfunction of equipment important to safety of a different type than any evaluated previously in the USAR may be created.

The margin of safety as defined in the basis for any Technical Specification is not reduced.

PLANT MODIFICATION REQUEST: 03409 Revision: 0

Diesel Generator Room Storage Cabinet And Work Bench Installation

Description:

This modification allows the permanent storage of a table and two tool gang boxes in each Diesel Generator Room. The gang boxes are fixed to the floor with seismically qualified anchor bolts to restrain gang boxes from damaging equipment. Additionally, this modification approves the storage of transient combustibles in the tool boxes.

Safety Evaluation:

The boxes and table are located remotely away from the diesel generators with the boxes anchored to the floor when located adjacent to plant piping or equipment. Additionally, the door(s) swing is limited to proximity to piping and equipment. There is no increase in the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the USAR.

Seismic anchor bolts are installed in the base of the gang boxes to assure the boxes do not impact on the fuel supply line for the diesel generator. The design precludes the potential of the gang boxes impacting on the equipment. Therefore, there is no possibility that an accident or malfunction of equipment important to safety of a different type than any evaluated previously in the USAR may be created.

The margin of safety as defined in the basis for any Technical Specification is not reduced.

PLANT MODIFICATION REQUEST: 03410 Revision: 0

Diesel Generator Starting Air Compressor Condensate Drainage

Description:

This modification involves incorporation into "as-built" design of drain lines temporarily installed on the 2nd and 3rd stage dump relief valve discharge for diesel generator starting air compressors.

Safety Evaluation:

This modification is classified as safety related because of attachments to a Category I structure. However, the drain piping installed from the air compressors does not affect operation of the diesel generators or any other safety related equipment. There is no increase in the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the USAR.

These drain lines provide a pathway for water to leave the air compressors to help prevent corrosion and oil degradation. Their routing and function, or malfunction, does not create the possibility of an accident or malfunction of equipment important to safety of a different type than any evaluated previously in the USAR.

The margin of safety as defined in the basis for any Technical Specification is not reduced.

PLANT MODIFICATION REQUEST: 03437 Revision: 1

Hydrogen Analyzer Subcomponent Qualified Life Recalculation

Description:

Previously, the subcomponents of the J-359 hydrogen analyzer were divided into several groups, and the qualified lives of each subcomponent were calculated by using a conservative activation energy for all the materials in each group. This method was unnecessarily conservative. With this revision, the qualified life of each subcomponent is calculated based on its own activation energy and aging data.

Safety Evaluation:

Recalculating the qualified lives of the subcomponents of the hydrogen analyzer using actual activation energies and environmental parameters for each subcomponent has no effect on previously evaluated accidents or safety related equipment malfunctions. Therefore, there is no increase in the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the USAR.

There is no possibility that an accident or malfunction of equipment important to safety of a different type than any evaluated previously in the USAR may be created.

The margin of safety as defined in the basis for any Technical Specification is not reduced.

PLANT MODIFICATION REQUEST: 03443 Revision: 0

Feedwater Computer Point Unit Modification

Description:

This modification provides for changing the Balance Of Plant Computer Point AEF105 to read in units of lb/hr instead of inches water column. This change will make it more consistent with Feedwater Flow Indicator AE-FI-105, which is part of the Condensate and Feedwater System (CFS). The modification does not affect any of the safety related portions of the CFS. They consist solely of wiring changes in Main Control Panel RP053CD which is not safety related and contains no safety related circuits.

Safety Evaluation:

This modification only impacts the non-safety related portion of the CFS. There is no increase in the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the USAR.

There is no possibility that an accident or malfunction of equipment important to safety of a different type than any evaluated previously in the USAR may be created.

There are no Technical Specification Bases for the portion of the CFS being modified. The margin of safety as defined in the basis for any Technical Specification is not reduced.

PLANT MODIFICATION REQUEST: 03451 Revision: 0

Residual Heat Removal Suction/Isolation Valve Automatic Closure
Interlock Removal

Description:

The Automatic Closure Interlock (ACI) ensures that both Residual Heat Removal (RHR) suction/isolation valves are fully closed when the Reactor Coolant System (RCS) pressure is greater than 682 psig. The ACI ensures that there is double isolation between the RCS and the RHR System when the plant is at normal operating conditions and precludes conditions that could lead to a Loss Of Coolant Accident (LOCA) outside containment. However, some recent loss of RHR events were caused by inadvertent automatic closure of the RHR suction/isolation valves. This modification provides for the removal of the ACI associated with the RHR suction/isolation valves and the addition of an alarm that actuates in the Main Control Room if the suction/isolation valve is "not fully closed" in conjunction with "RCS Pressure-high" to alert the operator of an incorrectly positioned RHR suction/isolation valve.

Safety Evaluation:

The removal of the ACI increases plant safety by decreasing the probability of an interfacing LOCA and increasing RHR System availability. There is no increase in the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the USAR.

This modification does not affect heat input transients and is considered to be a net improvement in plant safety. There is no possibility that an accident or malfunction of equipment important to safety of a different type than any evaluated previously in the USAR may be created.

The margin of safety as defined in the basis for any Technical Specification is not reduced.

PLANT MODIFICATION REQUEST: 03454 Revision: 0

Auxiliary Feedwater Pump Room Door Modification

Description:

This modification involves increasing the opening size of door 11281 to the Auxiliary Feedwater Pump Room. This is done by making the existing 3-foot 6-inch door into a mesh panel section and the existing 5-foot 0-inch panel section into a door (total meshenclosure is 8-feet 6-inches). The physical modification may utilize any appropriate combination of existing door materials, new channel, wire mesh, or fasteners. Any new material utilized is considered non-safety.

The existing security device on door 11281 will remain in the same configuration. The conduit/wiring will require an extension to the north to reach the new door. Appropriate security documentation will be revised at close out to reflect the as-built condition.

Safety Evaluation:

The same configuration of locking and security switches is maintained. The structural integrity of the door is not degraded. There is no increase in the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the USAR.

This modification retains the materials and basic structure of the existing door. There is no possibility that an accident or malfunction of equipment important to safety of a different type than any evaluated previously in the USAR may be created.

Door 11281 is not referenced or involved in any safety system defined in the Technical Specifications. Therefore, the margin of safety as defined in the basis for any Technical Specification is not reduced.

PLANT MODIFICATION REQUEST: 03479 Revision: 0

Leak Test Connection Addition

Description:

This modification adds a 3/4-inch vent and a 3-inch drain between each pair of the Essential Service Water (ESW) to Service Water (SW) cross-tie isolation valves. The addition is in the ESW System in the Control Building basement. The vents and drains are intended to improve the ability to drain the ESW and SW Systems and to enhance leak rate testing of the cross-tie isolation valves. The only change to the USAR effected by this modification is to show the addition of the vents and drains.

Safety Evaluation:

The vents and drains do not affect the ESW System operational characteristics and do not compromise the ability of the ESW System or any interfacing system to perform its intended safety function. The vents and drains are designed in accordance with existing design criteria. There is no increase in the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the USAR.

The addition of the vents and drains does not alter the seismic, environmental, or equipment qualification of any system, component or structure important to safety. There is no possibility that an accident or malfunction of equipment important to safety of a different type than any evaluated previously in the USAR may be created.

The margin of safety as defined in the basis for any Technical Specification is not reduced.

PLANT MODIFICATION REQUEST: 03482 Revision: 0

Mixed Waste Storage Modification

Description:

This modification provides alterations to the Owens Corning Building to meet the requirements for storage of mixed waste.

Safety Evaluation:

This modification does not affect any safety related equipment. There is no increase in the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the USAR.

Radioactive content is maintained below 10 CFR 20 and 50 Guidelines for normal operation including anticipated operational occurrences. There is no possibility that an accident or malfunction of equipment important to safety of a different type than any evaluated previously in the USAR may be created.

The margin of safety as defined in the basis for any Technical Specification is not reduced.

PLANT MODIFICATION REQUEST: 03506 Revision: 0

Circulating And Service Water Systems Fouling/Corrosion Monitoring
Sub-System Installation

Description:

This modification involves the implementation of fouling/corrosion monitoring sub-systems for the Circulating Water and Service Water Systems. The modification adds non-safety related small-bore piping which contains low energy cooling water. The modification is located in a remote section of the Turbine Building and supports a solely monitoring function.

Safety Evaluation:

The evaluation of Turbine Building flooding postulates a rupture of a 12-inch diameter expansion joint. This modification adds small-bore piping, which cannot approach such a large flow rate. There is no increase in the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the USAR.

There is no possibility that an accident or malfunction of equipment important to safety of a different type than any evaluated previously in the USAR may be created.

The margin of safety as defined in the basis for any Technical Specification is not reduced.

PLANT MODIFICATION REQUEST: 03507 Revision: 1

Diesel Building Heating, Ventilation, And Air Conditioning System
Operation Clarification

Description:

From a review and evaluation of the Diesel Building Heating, Ventilation, and Air Conditioning (HVAC) System design basis operation, it was determined that the USAR was unclear in respect to the minimum requirements necessary to ensure adequate combustion air during diesel operation. This modification provides for revision to the USAR and the Diesel Building HVAC System description to clarify the system operation.

Safety Evaluation:

This modification involves only a clarification of the supply and exhaust flow rate requirements in relation to the diesel combustion requirements. There is no increase in the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the USAR.

There is no possibility that an accident or malfunction of equipment important to safety of a different type than any evaluated previously in the USAR may be created.

This clarification of the Diesel Building HVAC System operation does not change its design basis. The margin of safety as defined in the basis for any Technical Specification is not reduced.

PLANT MODIFICATION REQUEST: 03511 Revision: 1

Atmospheric Relief Valve Actuator Environmental Qualification Update

Description:

The actuators for the Steam Generator (SG) Atmospheric Relief Valves (ARVs) AB PV0001, AB PV0002 and AB PV0004 had their NUREG-0588 Appendix E Loss of Coolant Accident (LOCA) and Main Steam Line Break (MSLB) categories changed from Category A (i.e., must function during and following a LOCA and MSLB) to Category C (i.e., may fail in any manner during or following a LOCA or MSLB).

Justification for this revision has been approved by the NRC in a letter dated February 25, 1988 from Paul O'Conner, NRC, to Bart Withers, Wolf Creek Nuclear Operating Corporation.

Safety Evaluation:

The SG Atmospheric Relief Valves have Masonilan No. 18 actuators for the purpose of controlled plant cooldowns. Based on an evaluation of the available information, it is concluded that a MSLB event with uncontrolled opening ARVs caused by failure of the actuators and their appurtenances has no adverse impact on plant safety.

In addition, upon receipt of a Steam Line Isolation Signal following a LOCA, the ARVs and their actuators close. Failure of the actuators after a LOCA will not reopen the ARVs. However, even if the valves were to open, manual isolation is possible by closing valves AB V0007, AB V0018, AB V0029 and AB V0040, since the steam tunnel will be accessible following a LOCA.

For these reasons, by assigning a NUREG-0588 Appendix E Category C for a MSLB and LOCA, and deleting the maintenance contingencies on the ARVs' actuators, the probability of occurrence and the consequences of an accident or malfunction of equipment important to safety previously evaluated in the USAR will not be increased.

The possibility of an accident or a malfunction of equipment important to safety of a different type than previously evaluated will not be created.

There is no reduction in the margin of safety as defined in the basis for any Technical Specification.

PLANT MODIFICATION K . VEST: 03529 Revision: 0, 1

Refueling Water Storage Tank Level Indication Modification

Description:

This modification allows abandonment of a non-safety related level indicator for the Refueling Water Storage Tank (RWST). A stainless steel tape connected to a float used for level indication was determined to be broken. Approximately 23-1/2 feet of tape is believed to still be hanging in the tank from the float. This modification also allows the spring clip, which has become detached from the front and has fallen to the bottom of the tank, to remain in the tank.

Safety Evaluation:

It has been determined that the free end of the tape does not reach the discharge nor adversely affect the operation of any plant equipment. The spring clip left in the bottom of the tank will stay in the tank and not affect any other equipment. There is no increase in the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the USAR.

Abandonment of the level indicator in its present configuration and the presence of the spring clip in the tank does not affect any systems, structures, or components important to safety. There is no possibility that an accident or malfunction of equipment important to safety of a different type than any evaluated previously in the USAR may be created.

The margin of safety as defined in the basis for any Technical Specification is not reduced.

PLANT MODIFICATION REQUEST: 03549 Revision: 0

Feedwater Isolation Reset Modification

Description:

This modification entails extending the P-4 Reactor Trip Signal logic from the Solid State Protection System (SSPS) Logic Cabinet to the control panel and back to utilize the handswitch to momentarily open the P-4 signal circuit. Opening of the circuit allows Control Room Operators to open the feedwater isolation valves in the presence of a P-4 reactor trip signal after either the Steam Generator Hi-Hi Alarm or Safety Injection Signal are removed.

Note that the presence of a second Steam Generator Hi-Hi Alarm or Safety Injection Signal will still result in a closure of the feedwater isolation valves, as per existing design. Also note that nothing happens if only a P-4 Reactor Trip Signal is received, again as per existing design.

Safety Evaluation:

The generation of protection signals is not impacted, nor is any protection signal permanently blocked by this modification. The outcome of a feedwater isolation upon Steam Generator Hi-Hi Alarm or Safety Injection Signal is not affected, however, this modification allows the Control Room Operators more flexibility in the recovery method. The outcome of a second scenario based upon the generation of a second signal, even during the "recovery period" of the first signal, is not affected. There is no increase in the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the USAR.

The failure modes and effects of this modification have been evaluated. There is no possibility that an accident or malfunction of equipment important to safety of a different type than any evaluated previously in the USAR may be created.

The margin of safety as defined in the basis for any Technical Specification is not reduced.

PLANT MODIFICATION REQUEST: 03558 Revision: 0

Essential Service Water Pump Access Platform Addition

Description:

This modification provides for the addition of two platforms in the Essential Service Water (ESW) pumphouse for access to ESW Pumps A & B, thus allowing easier routine maintenance.

Safety Evaluation:

These platforms are designed as seismic II/I so as not to affect any safety related equipment in the vicinity during a seismic event. There is no increase in the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the USAR.

Existing equipment and their seismic or environmental qualifications remain unaltered. There is no possibility that an accident or malfunction of equipment important to safety of a different type than any evaluated previously in the USAR may be created.

The margin of safety as defined in the basis for any Technical Specification is not reduced.

PLANT MODIFICATION REQUEST: 03561 Revision: 0

Feedwater Pump Seal Water Return Line Orifice Relocation

Description:

This modification relocates orifices on the seal water return line for each steam generator feedwater pump from near the feedwater pump to the condenser inlet. The modification is in the non-safety related portion of the Condensate and Feedwater System (CFS) in the Turbine Building. Relocation of these orifices eliminates vibration downstream of the orifices previously experienced during startup conditions. The relocation does not impact the function of the steam generator feedwater pumps nor the ability of the CFS to perform any power generation or safety design bases.

Safety Evaluation:

The system function and design parameters remain unchanged. There is no increase in the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the USAR.

This modification does not affect equipment important to safety. There is no possibility that an accident or malfunction of equipment important to safety of a different type than any evaluated previously in the USAR may be created.

The margin of safety as defined in the basis for any Technical Specification is not reduced.

PLANT MODIFICATION REQUEST: 03566 Revision: 0

2nd Stage Reheater Drain Tank Drainline Tee Replacement

Description:

Abnormal pipe-wall thinning has been identified in the 2nd Stage Reheater Drain Tank Drainline Tees downstream of Eccentric Orifices AC P0005, 006, 007 and 008. Cause of this abnormal pipe-wall thinning is two-phase erosion/corrosion (E/C), primarily impingement of high-velocity fluid through the bottomed eccentric orifice bores onto the downstream tee branches and possibly the adjoining feedwater heater 7A/B nozzles. This modification constitutes replacement of existing carbon-steel piping material with low-alloy steel, which is more resistant to E/C wear.

Safety Evaluation:

The subject piping is non-safety related and is located in the Turbine Building. Change in piping material from carbon steel to low-alloy steel will reduce the probability of leakage/rupture of subject process piping in the Turbine Building due to E/C wear. Allowable stress values are the same for the existing and replacement piping.

There is no increase in the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the USAR.

There is no possibility that an accident or malfunction of equipment important to safety of a different type than any evaluated previously in the USAR may be created.

The margin of safety as defined in the basis for any Technical Specification is not reduced.

PLANT MODIFICATION REQUEST: 03567 Revision: 0

Scavenging Steam Pipe Replacement

Description:

Abnormal pipe-wall thinning has been identified in the scavenging steam to heater 6B pipeline immediately downstream of Eccentric Orifice AC F0008. Cause of this abnormal pipe-wall thinning is two-phase erosion/corrosion (E/C), primarily impingement of high-velocity fluid through the bottomed eccentric orifice bore onto the adjacent piping wall. This modification constitutes replacement of existing carbon-steel piping material with low-alloy steel which is more resistant to E/C wear.

Safety Evaluation:

The subject piping is non-safety related and is located in the Turbine Building. Change in piping material from carbon steel to low-alloy steel will reduce the probability of leakage/rupture of subject process piping in the Turbine Building due to E/C wear. Allowable stress values are the same for the existing and replacement piping.

There is no increase in the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the USAR.

There is no possibility that an accident or malfunction of equipment important to safety of a different type than any evaluated previously in the USAR may be created.

The margin of safety as defined in the basis for any Technical Specification is not reduced.

PLANT MODIFICATION REQUEST: 03569 Revision: 0

Containment Penetration Redesign

Description:

This modification provides for the redesign of Containment Penetrations P-34 and P-65 to assist with Eddy Current Testing and Sludge Lancing. This modification removes the caps and adds flanges with blinds to the penetration sleeves. This will allow access into containment for Eddy Current cables and Sludge Lancing hoses and eliminate the routing of these lines through doorways and the emergency personnel hatch.

Safety Evaluation:

Using blind flanges in place of the original pipe caps still maintains the containment pressure boundary for these penetrations. There is no increase in the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the USAR.

Using a bolted flange closure instead of a weld cap does not create an accident or malfunction of equipment important to safety of a different type than any evaluated previously in the USAR.

The margin of safety as defined in the basis for any Technical Specification is not reduced.

PLANT MODIFICATION REQUEST: 03588 Revision: 0

Gaitronics Handset Addition

Description:

This modification provides for the addition of a desk-top handset in the Fire Protection office. The addition provides page and party-line communications on the plant Public Address System from the office.

Safety Evaluation:

This modification affects the non-safety related Public Address System and does not involve any equipment important to safety. There is no increase in the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the USAR.

There is no possibility that an accident or malfunction of equipment important to safety of a different type than any evaluated previously in the USAR may be created.

The Technical Specifications involving communications systems address only the requirement to maintain communications between the Control Room and refueling personnel. This modification does not affect this requirement. Therefore, the margin of safety as defined in the basis for any Technical Specification is not reduced.

PLANT MODIFICATION REQUEST: 03591 Revision: 0

Piping Material Substitution

Description:

During previous refueling outages, unplanned replacements of like-for-like pipe/pipe fittings were required as a result of abnormal two-phase erosion/corrosion (E/C). This modification provides a pre-Refuel V outage evaluation to allow for unplanned replacement of E/C worn piping components in the Main Turbine, Condensate, and Feedwater Heater Extraction and Drains Systems during the Refuel V outage with better E/C resistant materials and without the issuance of up-front design change documents.

Safety Evaluation:

The Main Turbine, Condensate, and Feedwater Heater Extraction and Drains Systems do not contain any safety related or special scope piping components. The proposed change of piping material in the Turbine Building from low-carbon steel to low-alloy steel does not increase the probability or consequences of any accident or malfunction of equipment important to safety previously evaluated in the USAR.

Piping configuration remains the same. The modification only involves a change to a high E/C-resistant material. Therefore, there is no possibility that an accident or malfunction of a different type from any evaluated previously in the USAR may be created.

No margin of safety in the Technical Specifications pertains to the subject piping. Therefore, the margin of safety as defined in the basis for any Technical Specification is not reduced.

PLANT MODIFICATION REQUEST: 03599 Revision: 0

Steam Generator Feedwater Pump Lube Oil Cooler Vent Line Modification

Description:

This modification involves adding flanges in the return vent lines, from the steam generator feedwater pump turbine lube oil coolers back to the respective lube oil reservoirs, to facilitate disassembly of the lines and tightening of threaded fittings. The material and installation configuration is commensurate with another installed application within the same return vent lines and similar service (lube oil) plant applications.

Safety Evaluation:

The subject components are part of the feedwater pump turbine lube oil system. The affected portion of this system does not serve a safety related function and is not evaluated in the USAR for an accident condition. Also, the USAR does not identify the affected portion as affecting equipment important to safety. Therefore, there is no increase in the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the USAR.

The subject addition of flanges does not affect the structural or flow characteristics of this system, therefore there is no possibility that an accident or malfunction of equipment important to safety of a different type than any evaluated previously in the USAR may be created.

The margin of safety as defined in the basis for any Technical Specification is not reduced.

PLANT MODIFICATION REQUEST: 03606 Revision: 0

Diesel Generator Master Transfer Switch Clarification

Description:

This modification provides a revision to the USAR to eliminate confusion on all applicable design documentation that inaccurately describes the existing diesel generator master transfer switches as "key-locked" or "key-operated". The handle currently used on the master transfer switches is a Westinghouse pistol grip type that is removable from the switch "key-shaft" when in the "automatic" position. This handle is described in the USAR and in other design documentation as "key-locked in the automatic position (key removed only in auto)". This description is incorrect or at least leads to the incorrect assumption that an actual "key" is involved.

Safety Evaluation:

This modification does not affect any system, structure, or component that is important to safety. Its only purpose is to make a change in existing baseline documentation to more accurately describe the type of switch currently installed. There is no increase in the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the USAR.

There is no possibility that an accident or malfunction of equipment important to safety of a different type than any evaluated previously in the USAR may be created.

The margin of safety as defined in the basis for any Technical Specification is not reduced.

PLANT MODIFICATION REQUEST: 03615 Revision: 0

Auxiliary Feedwater Pump Hoist Replacement

Description:

This modification provides for the installation of a new three ton hoist, replacing a previous two ton hoist, for Auxiliary Feedwater Pump Monorail and Hoist HKF11A. The hoist is located over safety related Auxiliary Feedwater Pump A. Thus, this modification is classified as seismic II/I (Special Scope).

The empty (idle) hoist must not fall off the monorail during a seismic event and strike the operating pump. During use of the hoist to lift a pump component, there is no II/I concern since the pump would not be operational. In addition, the Heavy Loads Report has evaluated the effect of a load drop and found that floor slab failure would not occur. This change only affects certain equipment location plans in the USAR which lists the hoist capacities for HKF11A.

Safety Evaluation:

No change has occurred in the loads to be lifted. Review of structural drawings concludes that the monorail structure is more than adequate to maintain a three ton capacity hoist. There is no increase in the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the USAR.

There is no possibility that an accident or malfunction of equipment important to safety of a different type than any evaluated previously in the USAR may be created.

The margin of safety as defined in the basis for any Technical Specification is not reduced.

PLANT MODIFICATION REQUEST: 02617 Revision: 0

Liquid Monitor Outlet Piping Replacement

Description:

The piping between the outlet nozzles of liquid effluent radiation monitors RE35 and 36 has been experiencing flow blockage. This modification increases the area of flow by replacing the outlet piping with 3/4-inch diameter SCH. 80 piping.

Safety Evaluation

The subject piping was evaluated with the pertinent allowances for corrosion and internal pressure for compliance to the ANSI B31.1 power piping code, and found that the proposed changes are acceptable. The safe operation of the system will not be adversely affected by the change, therefore the probability of occurrence and the consequences of an accident or malfunction of equipment important to safety previously evaluated in the USAR are not increased.

There is no possibility that an accident or malfunction of equipment important to safety of a different type than any evaluated previously in the USAR may be created.

The margin of safety as defined in the basis for any Technical Specification is not reduced.

PLANT MODIFICATION REQUEST: 03619 Revision: 0

Synchronizing Check Relay Acquisition

Description:

This modification initiates a USAR change resulting from a concern regarding the identification of a non-safety related synchronizing check relay as safety related. The disposition to this modification states that this relay does not perform a safety related function but that it is identified as safety related because it is an associated component and the USAR states that associated components are identified as safety related.

The subject USAR change is just a clarification of a paragraph that discusses interlocks that would prevent operator error from paralleling the standby power sources. There are no such interlocks; however, there are interlocks in the form of synchronizing check relays that would prevent an operator error from paralleling the standby power sources with the available offsite power when they are out-of-synchronism. That is, if the operator made an error by closing the control switch of the circuit breaker when the DG is not synchronized with the available offsite power, the DG (or available offsite power) circuit breaker will not close if the relay does not provide a closing permissive signal.

Safety Evaluation:

This change is for clarification purposes, so there is no increase in the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the USAR.

The synchronizing check relay does not perform a safety function and its failure will not affect the function of safety related equipment. There is no possibility that an accident or malfunction of equipment important to safety of a different type than any evaluated previously in the USAR may be created.

The margin of safety as defined in the basis for any Technical Specification is not reduced.

PLANT MODIFICATION REQUEST: 03651 Revision: 0

Nitrogen Isolation Valve Addition

Description:

This modification adds isolation valves to facilitate maintenance and manual closure of a potentially failed main steam atmospheric relief valve (ARV). These new isolation valves are maintained normally open, maintain the required flow and pressure of the nitrogen, and therefore, do not affect normal operation of the ARVs. The addition of these valves enhances isolation capability that already exists by allowing isolation of nitrogen to an ARV without isolating the associated auxiliary feedwater control valve. Additionally, the means to access the nitrogen isolation valves, as well as the compressed air isolation valves, are provided by ladders installed by this modification.

Safety Evaluation:

This modification does not affect the ability of the ARVs to perform their design function. There is no increase in the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the USAR.

No new hazards are created, no previously evaluated hazard analyses are affected and no new failure modes of any component, system, or structure are introduced. There is no possibility that an accident or malfunction of equipment important to safety of a different type than any evaluated previously in the USAR may be created.

Since the function of the ARVs is not altered in any way, the margin of safety as defined in the basis for any Technical Specification is not reduced.

PLANT MODIFICATION REQUEST: 03669 Revision: 0

Feedwater Pre-Heating Remote Control Addition

Description:

This modification installs two non-safety related controllers onto Panel RLO27 of the Main Control Board. Two Litton non-safety related connectors are also installed at the bottom far right end of the panel away from any safety related components.

Safety Evaluation:

The net weight change on Panel RLO27 is insignificant and the seismic qualification of the panel remains valid. There is no increase in the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the USAR.

This modification does not adversely affect any equipment important to safety. There is no possibility that an accident or malfunction of equipment important to safety of a different type than any evaluated previously in the USAR may be created.

The margin of safety as defined in the basis for any Technical Specification is not reduced.

PLANT MODIFICATION REQUEST: 03671 Revision: 0

Spent Fuel Pool Exhaust Sample Isolation Valve Fuse Replacement

Description:

This modification involves the replacement of 3A fuses associated with 120 VAC controls for Spent Fuel Pool Normal/Emergency Exhaust Sample Isolation Valves GC RV027A, B, C, & D and GG RV028A, B, C, & D with 6A fuses.

Safety Evaluation:

The safety function of the affected valves is to provide flow of sample air to the fuel building exhaust gaseous radiation monitors. This modification ensures that the proper size fuse is installed. The replacement fuse is similar to the existing fuse except for the time-current characteristics. Since it is rated at a higher current, it is more reliable. Therefore, there is no increase in the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the USAR.

This modification has no adverse impact on any of the affected components. There is no possibility that an accident or malfunction of equipment important to safety of a different type than any evaluated previously in the USAR may be created.

The margin of safety as defined in the basis for any Technical Specification is not reduced.

PLANT MODIFICATION REQUEST: 03683 Revision: 0

Drawing Continuation Correction

Description:

This modification corrects the continuation between drawings M-12HC04 of the Solid Radwaste System, M-02LF05 of the Auxiliary Building Floor and Equipment Drain System and M-12BGC2 of the Chemical Volume Control System. This modification also corrects the applicable figures in the USAR.

Safety Evaluation:

Correcting the continuation between drawings does not increase the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the USAR.

There is no possibility that an accident or malfunction of equipment important to safety of a different type than any evaluated previously in the USAR may be created.

The margin of safety as defined in the basis for any Technical Specification is not reduced.

PLANT MODIFICATION REQUEST: 03685 Revision: 0

Relief Valve Discharge Tailpiece Installation

Description:

This design change provides for the addition of exhaust tailpieces on relief valves KA V703 and KA V714. These valves serve the main feedwater control valve accumulator and its downstream piping, and are located in the Turbine Building. The addition of these tailpieces redirects the nitrogen discharge and provides a safer environment for personnel working in the area.

Safety Evaluation:

This modification applies only to the portion of the Compressed Air System that serves the main feedwater control valves which is non-safety related. This modification does not affect any environmental, seismic, or equipment qualification of any system, component or structure. There is no increase in the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the USAR.

The loss of the tailpieces would not hinder the functioning of this subsystem. Additionally, the addition of tailpieces does not affect the valve setpoints. There is no possibility that an accident or malfunction of equipment important to safety of a different type than any evaluated previously in the USAR may be created.

The margin of safety as defined in the basis for any Technical Specification is not reduced.

PLANT MODIFICATION REQUEST: 03686 Revision: 0

Addition Of Telephone And Convenience Outlets

Description:

This modification consists of adding telephone and convenience outlets in the Control Building. The systems affected by the additions are the non-safety related Telephone (QE) and Normal Lighting (QA) Systems.

Safety Evaluation:

This modification does not involve spatial or system interaction to safety related equipment. There is no increase in the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the USAR.

There is no possibility that an accident or malfunction of equipment important to safety of a different type than any evaluated previously in the USAR may be created.

The margin of safety as defined in the basis for any Technical Specification is not reduced.

PLANT MODIFICATION REQUEST: 03693 Revision: 0

Component Cooling Water Piping Configuration Drawing Correction

Description:

The as-built condition of the piping downstream of the Essential Service Water to Component Cooling Water Pumps Train A Drain Valve EG V181 is different than indicated on an associated drawing. The as-built condition is correct, therefore this modification corrects the configuration found on the drawing.

Safety Evaluation:

The physical configuration remains unaffected. Changing the drawings to reflect as-built conditions does not affect any accident analysis. There is no increase in the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the USAR.

There is no possibility that an accident or malfunction of equipment important to safety of a different type than any evaluated previously in the USAR may be created.

The margin of safety as defined in the basis for any Technical Specification is not reduced.

PLANT MODIFICATION REQUEST: 03706 Revision: 0

Site Auxiliary Power System Drawing Change

Description:

This modification provides a change to a Site Auxiliary Power System drawing to reflect the correct site architect/engineer equipment number for 480 V Motor Control Center SL2K.

Safety Evaluation:

This is a drawing change only. There is no increase in the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the USAR.

There is no possibility that an accident or malfunction of equipment important to safety of a different type than any evaluated previously in the USAR may be created.

The margin of safety as defined in the basis for any Technical Specification is not reduced.

PLANT MODIFICATION REQUEST: 03708 Revision: 0

Feedwater Heater Continuous Vent Orifice Replacement

Description:

This modification replaces the continuous vent orifices on Feedwater Heaters 5A & B, 6A & B and 7A & B with stainless steel "integral orifices". The subject orifices are non-safety related and are associated with the Feedwater Heater Extraction Drains and Vent System. The new integral orifices eliminate localized erosion exhibited in the original orifices that were supplied by the feedwater heater manufacturer.

Safety Evaluation:

This modification does not affect the ability of the feedwater heaters to perform their design function. There is no increase in the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the USAR.

No new hazards are created nor are any new failure modes of equipment introduced. There is no possibility that an accident or malfunction of equipment important to safety of a different type than any evaluated previously in the USAR may be created.

The Technical Specifications do not address the Feedwater Heater Extraction Drains and Vents System. Therefore, the margin of safety as defined in the basis for any Technical Specification is not reduced.

PLANT MODIFICATION REQUEST: 03723 Revision: 0

Control Rod Drive Mechanism Cooling Fan Motor Replacement

Description:

This modification provides for the replacement of the control rod drive mechanism cooling fan assembly motor. The original fan assembly design calls for a 40 hp motor but the motor had been previously replaced by a 50 hp motor because a replacement 40 hp motor was not immediately available. Subsequently, the 50 hp motor failed and a 40 hp motor is available. Therefore, this modification restores the fan assembly to its original design.

Safety Evaluation:

Since this modification restores the fan assembly to its original design, there is no increase in the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the USAR.

There is no possibility that an accident or malfunction of equipment important to safety of a different type than any evaluated previously in the USAR may be created.

The margin of safety as defined in the basis for any Technical Specification is not reduced.

PLANT MODIFICATION REQUEST: 03731 Revision: 0

Westinghouse NCT Test Card Permanent Use-As-Is

Description:

In the Westinghouse 7300 Process Protection System cabinets, NCT channel test cards provide a means of conveniently testing various system channels while the system is on-line. The NCT cards are normally used on channels which interface only with the safety related Solid State Protection System, and therefore do not require electrical isolation. However, for the Containment Spray System, a contact from the NCT card provides a signal to the annunciator to indicate when a channel has been bypassed for test. Since the NCT cards are safety related and the annunciator system is non-safety related, electrical isolation is required to prevent propagation of faults from non-safety systems. Per Westinghouse, the NCT cards have not been qualified as isolation devices. However, it has been concluded that the NCT cards are acceptable for use in their present configuration and no modification to the Westinghouse 7300 Process Protection System is needed. Therefore, this modification allows a permanent use-as-is for the NCT cards.

Safety Evaluation:

Permanent use-as-is of the NCT cards does not adversely affect the ability of the Containment Spray System to perform its safety related function. There is no increase in the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the USAR.

Permanent use-as-is of the NCT cards does not adversely affect the reliability of any other equipment. There is no possibility that an accident or malfunction of equipment important to safety of a different type than any evaluated previously in the USAR may be created.

The margin of safety as defined in the basis for any Technical Specification is not reduced.

PLANT MODIFICATION REQUEST: 03739 Revision: 0

Fire Damper Safety Classification

Description:

This modification involves the clarification of the safety classification of six fire dampers. Various documents had indicated different safety classifications for the fire dampers. The cause of the discrepancies was attributed to different interpretations of the design documents at various stages of design. This modification also provides a revision to the USAR to indicate the proper safety classification for the fire dampers.

Safety Evaluation:

Since the fire dampers do not perform a safety related or seismic II/I function and their ability to perform their design basis function is not being affected by this modification, there is no increase in the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the USAR.

This modification does not adversely affect any seismic, environmental, or equipment qualifications of any other system, component, or structure. There is no possibility that an accident or malfunction of equipment important to safety of a different type than any evaluated previously in the USAR may be created.

The margin of safety as defined in the basis for any Technical Specification is not reduced.

PLANT MODIFICATION REQUEST: 03759 Revision: 0

Lime Sludge Pump Discharge Isolation Valve Documentation Update

Description:

The lime sludge pump discharge isolation valves lack proper documentation to assist in the purchase of correct parts to rework the valve. This modification corrects the drawing and documentation applicable to these valves to include the appropriate information.

Safety Evaluation:

These valves are part of the non-safety related Demineralized Water System. This modification does not affect the operation or the credible failure modes of the system. There is no increase in the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the USAR.

Since the failure modes remain unchanged, an accident or malfunction of equipment important to safety of a different type than any evaluated previously in the USAR cannot be created.

The margin of safety as defined in the basis for any Technical Specification is not reduced.

PLANT MODIFICATION REQUEST: 03792 Revision: 0

Residual Heat Removal Relief Valve USAR Clarification

Description:

This modification provides a clarification and a correction to the USAR to state the "stamped" capacity for the Residual Heat Removal (RHR) relief valve and differentiate between this stamped capacity and the required flow capacity. Also, this modification revises the vendor manual by deleting reference to the non-bellows type valve and replacing it with the correct reference to the bellows type valve.

Safety Evaluation:

This modification confirms that the RHR relief valves relieves the required flow. There is no increase in the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the USAR.

The form, fit, and function of the valve remains unchanged because this modification reconciles documentation only. There is no possibility that an accident or malfunction of equipment important to safety of a different type than any evaluated previously in the USAR may be created.

This modification confirms that the margin of safety is maintained. Therefore, the margin of safety as defined in the basis for any Technical Specification is not reduced.

PLANT MODIFICATION REQUEST: 03825 Revision: 0

Air Quality Requirements

Description:

This modification provides a USAR change to reflect the air quality standards being met for the Instrument Air System.

Safety Evaluation:

The Instrument Air System continues to meet manufacturers' air quality requirements for safety related components using air. There is no increase in the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the USAR.

There is no possibility that an accident or malfunction of equipment important to safety of a different type than any evaluated previously in the USAR may be created.

The margin of safety as defined in the basis for any Technical Specification is not reduced.

PLANT MODIFICATION REQUEST: 03832 Revision: 0

Security Building Access Screening And Restroom Modification

Description:

This is a modification to the access screening area of the security building to bring it into compliance with 10 CFR 26, App. A. The modification reconfigures the area to allow only one restroom for public use and the other for access screening only.

Safety Evaluation:

This modification does not affect plant equipment. There is no increase in the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the USAR.

There is no possibility that an accident or malfunction of equipment important to safety of a different type than any evaluated previously in the USAR may be created.

The margin of safety as defined in the basis for any Technical Specification is not reduced.

PLANT MODIFICATION REQUEST: 03868 Revision: 0

NUREG-0588 Appendix E Category Change

Description:

This modification provides for changing the NUREG-0588 Appendix E Loss of Coolant Accident (LOCA) and Main Steam Line Break (MSLB) categories for the main steam isolation valve (MSIV) limit switches and main feedwater isolation valve (MFIIV) limit switches. The change is from Category A (i.e., must function during and following a LOCA or MSLB) to Category C (i.e., may fail in any manner during or following a LOCA or MSLB).

Safety Evaluation:

A MSLB event with failure of the MSIV and MFIIV limit switches has no adverse impact on plant safety. Indication of steam generator (SG) isolation and feedwater isolation can be determined by use of alternate equipment. Additionally, failure of the limit switches after a LOCA will not reopen the MSIVs and FWIVs and will not mislead plant operators into performing actions adverse to plant safety. There is no increase in the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the USAR.

Changing the Appendix E Categories of the limit switches does not create an accident or malfunction of equipment important to safety of a different type than any evaluated previously in the USAR.

The margin of safety as defined in the basis for any Technical Specification is not reduced.

Section II

SAFETY EVALUATION: 90-SE-037 Revision: 0

Essential Service Water Fill And Vent Temporary Procedure

Description:

This temporary procedure provides a valve line up and means to fill and vent the A Train Essential Service Water (ESW) System from the in-service B Train ESW System. The procedure throttles open the cross tie connection between A and B Train ESW Systems. The cross tie has two manual isolation valves in it which are locked closed, as shown in the USAR. This procedure unlocks and throttles open these valves.

Safety Evaluation:

The procedure implements adequate corrective measures by requiring an operator in the ESW Pump House to terminate the filling of the idle ESW train by isolating the cross tie should the in-service ESW train be called upon to fulfill its safety function. This action ensures the capability of the in-service ESW train in meeting the cooling needs of all previously evaluated accidents which can occur during the given plant conditions.

Adequate cooling flow will remain available for cooling normal plant heat loads during the filling process because only a small amount of pumped flow for a brief period of time will be removed from the total flow. Pressure and temperature indication and alarms remain available to the Control Room operators on the systems cooled by ESW; thus, a feedback indication of any adverse affects is available. There is no increase in the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the USAR.

The procedure does not change the seismic qualification, environmental qualification, or physical separation distance of any equipment. There is no possibility that an accident or malfunction of equipment important to safety of a different type than any evaluated previously in the USAR may be created.

The actions in the procedure to terminate filling of the idle ESW train ensures that the capability to cool the accident loads is safeguarded. The margin of safety as defined in the basis for any Technical Specification is not reduced.

SAFETY EVALUATION: 90-SE-060 Revision: 1

Radiologically Controlled Area Designation Of Storage Building

Description:

This evaluation is for the designation of a storage building as a Radiologically Controlled Area (RCA). This building is to be used as a storage area for radioactive materials such as equipment and tools, especially outage related items. No liquid, gaseous or processed solid radwaste material will be processed or stored in this area because this area was not designed to the requirements of Regulatory Guide 1.143, which addresses design requirements such as drainage, spillage, overflow, seismic and materials selection criteria for radioactive waste systems, structures and components.

Existing RCA procedural requirements are invoked upon this new storage area and guidelines for packaging, transporting, storing and retrieving items from this new storage area are provided.

Safety Evaluation:

The potential to release radioactivity to the environment from this new RCA storage area has not been introduced because adequate controls and protection are provided. The consequences of previously evaluated accidents bound any potential radiological consequences which could occur in the new RCA storage area. The probability of occurrence and the consequences of an accident or malfunction previously evaluated in the USAR is not increased.

This building is not considered in the USAR accident evaluations. The closest building which contains equipment important to safety is approximately 700 feet away. There is no possibility that an accident or malfunction of equipment important to safety of a different type than evaluated previously in the USAR may be created.

There is no reduction in the margin of safety as defined in the basis for any Technical Specification.

SAFETY EVALUATION: 90-SE-070 Revision: 3

Essential Service Water Flow And Pressure Instrumentation

Description:

Instruments have been temporarily installed on both trains of the Essential Service Water (ESW) System to take flow and pressure readings. The instruments include two flow meters, sixteen pressure gauges and four differential pressure cells. Q-fittings are used for connecting the communicating lines from the two differential pressure (DP) cells to the ESW piping. The installation of these instruments is not reflected in the USAR, therefore, a PSAR description change is introduced.

The total evaluated leakage from the ESW System, including this temporary modification, is presently 80.9 gpm. This leakage is much less than the allowable leakage of 268 gpm. Engineering maintains a list of all postulated Ultimate Heat Sink (UHS) leakage and re-evaluates available margin whenever a new potential leakage source is identified or when a previously evaluated source is eliminated.

Safety Evaluation:

The small ESW connection, vent, and drain lines that the instrumentation is installed on are Seismic Category I. The commercial pipe fittings, gauges and flex hose connected at these locations maintain system operating pressure and does not adversely affect the seismicity of the pipe lines.

Assessment of the affect this modification has on the malfunction probability or possibility of the ESW equipment has concluded no increase in the malfunction frequency of this equipment because this equipment is not affected by the modification. The failure modes analysis of the ESW equipment has not been changed by the temporary instrumentation. The reliability, capability and integrity of the ESW System in providing cooling flow to the plant during accident conditions has not been degraded by the modification.

The identified loss of UHS inventory is insignificant upon the performance of the ESW system in fulfilling its safety function. Temporary installation of the instruments to the ESW System does not create the possibility of an accident or malfunction of equipment important to safety of a different type than any evaluated previously in the USAR.

The reliability, capability and integrity of the ESW System in providing cooling flow to the plant during accident conditions has not been degraded by this modification. Therefore, there is no reduction in the margin of safety as defined by the basis for any Technical Specification.

SAFETY EVALUATION: 90-SE-083 Revision: 2

USAR Chapter 13 Change

Description:

The subject USAR Change Request addresses a change to the training program described in USAR Section 13.2. The change to USAR paragraph 13.2.1.2.8.2 under the title of "Licensed Operator Requalification Training Standards", reflects the satisfactory score the operator must achieve on the walkthrough portion of the requalification exam and defines the weighted average of the Job Performance measures and the associated questions.

Safety Evaluation:

This change does not affect plant equipment or safety barriers, either physical or operational. This change reflects the current regulatory guidance for the subject requalification examination. There is no increase in the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the USAR.

There is no possibility that an accident or malfunction of equipment important to safety of a different type than any evaluated previously in the USAR may be created.

The margin of safety as defined in the basis for any Technical Specification is not reduced.

SAFETY EVALUATION: 90-SE-097 Revision: 0

DC Ground Location

Description:

The subject procedure provides the means for locating grounds on the DC power systems. The procedure places a small amplitude AC voltage signal between the grounded DC bus and plant ground and then traces it to the ground source. This procedure action introduces a change to the facility's DC systems from their descriptions in the USAR. This technique does not degrade the operability of the DC systems.

Safety Evaluation:

Placing a small amplitude AC voltage signal on the grounded bus of a class IE DC system to track down a ground will not have an unacceptable influence on the IE DC circuits or components in these circuits. A malfunction in the non-IE AC system (i.e., short to ground) will not adversely affect the IE DC system because a qualified isolation device exists between the two systems. There is no increase in the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the USAR.

The actions performed on the DC systems by the subject procedure do not affect the integrity or reliability of these power sources or their distribution systems. Also, the physical, electrical, environmental and seismic qualification features of the class IE electrical subsystem are maintained and not impaired. There is no possibility that an accident or malfunction of equipment important to safety of a different type than any evaluated previously in the USAR may be created.

The integrity, reliability and capacity of the class IE DC systems remains unaffected. The margin of safety as defined in the basis for any Technical Specification is not reduced.

SAFETY EVALUATION: 91-SE-001 Revision: 0

Steam Line Drain Welded Wear Pad Installation

Description:

Through wall steam leakage was identified at the junction of a spool and the drain line from the main and auxiliary feedwater pump turbines low point steam line drains to the main condenser. This line is non-seismic and is not required for safe plant shutdown.

This temporary modification installs a welded wear pad on the subject piping line. The wear pad is made from a section of 5-inch schedule 160 carbon steel pipe. Fillet welds are used to attach the wear pad to the piping spool.

Safety Evaluation:

This temporary modification maintains the pressure boundary integrity of the subject drain piping and does not adversely affect the operation of systems or components important to safety. There is no increase in the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the USAR.

There is no possibility that an accident or malfunction of equipment important to safety of a different type than any evaluated previously in the USAR may be created.

The margin of safety as defined in the basis for any Technical Specification is not reduced.

SAFETY EVALUATION: 91-SE-002 Revision: 0

Temporary Nitrogen Bottle Connection

Description:

This temporary modification provides for the connection of a temporary nitrogen bottle at a service gas system test connection valve located in the Turbine Building. The bottle connects to the valve using a non-rigid connector to allow for small movement or vibration of the bottle and fastens to an "I" beam or other structure such that it will remain secure during a seismic event.

Safety Evaluation:

The nitrogen system serves no direct safety related function. The operating conditions of systems exposed to the temporary nitrogen feed will not be changed. Previously evaluated accidents and equipment malfunctions are not changed by this temporary nitrogen bottle hookup. Therefore, there is no increase in the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the USAR.

The operating parameters of the affected system is maintained. There is no possibility that an accident or malfunction of equipment important to safety of a different type than any evaluated previously in the USAR may be created.

The Service Gas System is not covered in the Technical Specifications. There is no reduction in any margin of safety defined in the basis for any Technical Specification.

SAFETY EVALUATION: 91-SK-003 Revision: 0

Safety Injection Pump Upstream Valve Temporary Modification

Description:

This temporary modification involves temporarily blocking open EM HV8924, one of three valves in the charging pump to safety injection pump crossover line, to assist with work activities. The valve's position is normally open.

Safety Evaluation:

Blocking open EM HV8924 does not degrade the safety related function of this line. If necessary, the valve can be closed manually using the valve operator hand wheel. There is no increase in the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the USAR.

The arrangement of three valves in this line prevents a single active failure from activating or isolating this line. There is no possibility that an accident or malfunction of equipment important to safety of a different type than any evaluated previously in the USAR may be created.

The valve is normally open, which is its required position for post accident recirculation. Therefore, the margin of safety as defined in the basis for any Technical Specification is not reduced.

SAFETY EVALUATION: 91-SE-004 Revision: 0

Mixed Bed Demineralizer Temporary Shielding

Description:

Temporary lead shielding was required to radiologically protect personnel near Mixed Bed Demineralizers A & B. An evaluation was performed to determine the acceptability of additional loading imposed by placing shielding on the demineralizer piping.

The evaluation determined that the affected piping would remain within code allowables and the affected adjacent pipe support design loads will remain acceptable for the load increase resulting from the additional weight of the shielding provided that: All adjacent supports remain operational; the maximum weight of temporary shielding does not exceed 10 lbs/linear foot; All lead blankets are removed after completion of maintenance activities; The extent of the lead shielding complies with that specified in the Engineering Disposition that addresses the maintenance activities.

Safety Evaluation:

The installation of this temporary shielding has been evaluated and installation requirements have been established to ensure that no equipment important to safety will be compromised. Therefore, there is no increase in the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the USAR.

The additional weight of the temporary shielding has been evaluated to ensure pressure boundary integrity is maintained during a seismic event. Although the additional weight of this shielding does change the loading on the pipe support design loads, the affected piping remains within code allowables. Therefore, there is no possibility that an accident or malfunction of equipment important to safety of a different type than any evaluated previously in the USAR may be created.

The margin of safety as defined in the basis for any Technical Specification is not reduced.

SAFETY EVALUATION: 91-SE-005 Revision: 0

Instrument And Service Air Compressor Pressure Drop Testing

Description:

This temporary procedure provides instructions for pressure drop testing of the Essential Service Water (ESW) supply and return piping to Instrument and Service Air Compressors CKAC1A & B. This temporary procedure involves the temporary installation of flow meters, pressure gauges, and differential pressure gauges to measure flow and pressure drop data.

The air compressors are out of service when piping pressure drop testing is performed. ESW flow is established by opening the solenoid bypass valve to the air compressor being tested. The ESW System remains operable throughout the test.

Test gauges are installed on vent, drain, and chemical addition valves using flexible hose so as not to rigidly couple the gauges to the ESW piping, therefore seismicity is not affected. The root valves remain closed except when taking a reading, therefore Ultimate Heat Sink inventory shall be maintained.

Safety Evaluation:

The installation of test instrumentation will not interfere with the normal functions of the ESW System. The ability of the equipment to function as designed is not affected. There is no increase in the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the USAR.

This temporary procedure causes no new challenges to equipment important to safety. There is no possibility that an accident or malfunction of equipment important to safety of a different type than any evaluated previously in the USAR may be created.

The margin of safety as defined in the basis for any Technical Specification is not reduced because operation of the ESW System has not been degraded by this temporary procedure.

SAFETY EVALUATION: 91-SE-006 Revision: 0, 1

Condenser Nitrogen Introduction

Description:

A previously performed temporary procedure proved that a nitrogen blanket on the condenser hotwells could effectively reduce condensate dissolved oxygen to levels below 10 ppb. The temporary procedure called for bottled nitrogen to be introduced to the condenser through drain valves. This temporary modification calls for the connection of the low pressure Nitrogen Supply System to Main Feed Pump Turbine Startup Drain Line Drain Valve AD V460 and AD V462. In order to prevent freezing, the connections will be wrapped in heat tape to be energized, as necessary.

Safety Evaluation:

The installation of the nitrogen supply line does not affect the initiators of previously evaluated accidents and does not involve any equipment important to safety. Therefore, there is no increase in the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the USAR.

There are no unique or different challenges to equipment important to safety. There is no possibility that an accident or malfunction of equipment important to safety of a different type than any evaluated previously in the USAR may be created.

The margin of safety as defined in the basis for any Technical Specification is not reduced.

SAFETY EVALUATION: 91-SE-007 91-SE-008 Revision: 0

Emergency Fuel Oil Transfer Pump Inservice Pump Test Revision

Description:

This test is performed to satisfy Technical Specification Requirement 4.0.5 for inservice testing of fuel oil transfer pump PJE01A and B in accordance with ASME Section XI. To perform inservice testing of PJE01A & B, the test specifies opening the PJE01A & B breaker, draining the day tank to a level below the pump automatic start setpoint, and then closing the breaker to start the pump. However, in only 2 1/2 to 3 minutes, the hi-level setpoint is reached and automatically stops the pump. This restricts the amount of time provided for gage venting and recording of test data.

The revised test method consists of manually starting the pump and utilizes a jumper installed in its relay panel to prevent hi-level shutoff of the pump. After the flow stabilizes and pump data is recorded, the pump is manually shut off and the jumper is removed to restore automatic hi-level pump shutoff. Overflow protection is provided by the overflow and recirculation line from the day tank to the storage tank. The revised test method allows more time for recording test data and meets the ASME XI requirement (minimum 5 minute pump run time).

Safety Evaluation:

The revised test mode consists of the pump running beyond the (normally) automatic hi-level shutoff point, thus it continuously supplies oil to the day tank during the test with recirculation back to the storage tank. This is a more conservative mode than the normal system configuration and if during the test, the diesel should start with the automatic hi-level pump shutoff bypassed, it will not affect the ability of the Emergency Diesel Engine Fuel Oil Storage and Transfer System (EDEPSTS) to deliver fuel oil to the diesel engine.

The revised test method does not contribute to any previously evaluated accidents or compromise any equipment important to safety. Therefore, there is no increase in the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the USAR.

The revised method of testing PJE01A & B does not affect the ability of the EDEPSTS to deliver fuel oil to the diesel engines following a loss of offsite power. There is no possibility that an accident or malfunction of equipment important to safety of a different type than any evaluated previously in the USAR may be created.

The margin of safety as defined in the basis for any Technical Specification is not reduced.

SAFETY EVALUATION: 91-SE-009 Revision: 0

Main Steam Safety Valve On-Line Testing

Description:

This test briefly opens the main steam safety valves as the setpoint is measured. This test involves procedurally controlled installation of a pressure gauge on the main steam line instrumentation lines. A flexible line is used to connect the pressure gauge, thus eliminating any possible seismic effects of the gauge on the permanent system.

Safety Evaluation:

The procedure limits pressure gauge installation to one location and one loop at a time. There are three Engineered Safety Feature (ESF) channels per steam line for Safety Injection Signal (SIS) or Steam Line Isolation Signal (SLIS) activation. Two of three are the minimum required number of operable channels, and two of three responses are necessary for ESF activation. The pressure gauge installation will not affect ESF response.

The procedure does not affect the previously evaluated accidents of increased steam flow or inadvertent opening of the main steam safety valves. Also, the operation of the main steam safety valves is unaffected. There is no increase in the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the USAR.

This procedure does not affect any other components important to safety. There is no possibility that an accident or malfunction of equipment important to safety of a different type than any evaluated previously in the USAR may be created.

Two of three channels are needed to activate SIS or SLIS. Adding a pressure gauge to the instrumentation lines does not affect the margin of safety because the gauge can only be installed at one location at a time per the procedure. The margin of safety as defined in the basis for any Technical Specification is not reduced.

SAFETY EVALUATION: 91-SF-010 Revision: 0, 1

Diesel Generator DC Control Circuitry Capacitor Installation

Description:

This temporary modification installs capacitors on the positive and negative wires supplying power to the tachometer relay in the DC control circuit for Diesel Generator KKJ01A. The purpose of these capacitors is to reduce AC signal noise on the DC power supplied to a level which will not adversely affect operation of the diesel generator tachometer relay. This modification constitutes a change to the USAR description.

Wires will be securely fastened to existing cable bundles using qualified tie wraps as necessary. The bracket is fastened to the bottom of the cabinet frame. This method of securing the capacitors has been reviewed and approved as seismically adequate. Due to the low mass of the capacitors and their location at the bottom of the panel, no significant change in seismic characteristics has been introduced into the panel. Some additional mass is added by the fastening material, however this mass is also located at the base of the panel and introduces no significant change to seismic characteristics.

Safety Evaluation:

Installation of capacitors in the DC control circuit for KKJ01A adds 2 additional subcomponents to the control panel. This installation does not affect the initiators of previously evaluated accidents and because the additional components meet applicable equipment specification requirements, the magnitude of malfunction probability is not increased. Therefore, there is no increase in the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the USAR.

Installation of this temporary modification will only affect operation of the control circuitry for Diesel Generator KKJ01A. Operation of the Class IE 125 VDC system will not be affected since the capacitors will be on the load side of local fuses. There is no possibility that an accident or malfunction of equipment important to safety of a different type than any evaluated previously in the USAR may be created.

The margin of safety as defined in the basis for any Technical Specification is not reduced.

SAFETY EVALUATION: 91-SE-011 Revision: 0

Inoperable Class IE Air Conditioning Unit

Description:

When a class IE Air Conditioning (AC) unit becomes inoperable, this procedure provides the means to cool the areas of the inoperable AC unit by the operable AC unit (second train) for normal plant operator's duty. Maintaining temperature limits will not expose equipment to a temperature in excess of its qualification.

The procedure opens interior doors and uses portable fans for temporary air circulation. A review of this cooling configuration determined that a single class IE AC unit is capable of cooling both system train areas. Also evaluated was the introduction of outside air by opening exterior Control Building doors in the event that the one operable AC unit is not capable of performing up to 100% of its rated cooling load. Requirements have been incorporated into the procedure to ensure that no adverse conditions to equipment or Control Room operators have been created or increased. These requirements are that all fire doors breached are controlled per procedure and all pressure doors breached are closed in the event of a chemical or chlorine release, Control Room Ventilation Isolation Signal (CRVIS), or a pipe or tank rupture in the vicinity. Missile doors are closed during a tornado warning. Pressure doors are controlled in accordance with Operations Special and Standing Orders, which require a person assigned at the door continuously under the direct auspices of the Control Room. The dedicated person closes the door when directed by the Control Room. These actions will ensure fulfillment of the CRVIS function or tornado missile protection by restoring the plant configuration to that assumed in the accident/hazard analysis.

Safety Evaluation:

Technical Specification temperature limits are maintained, thus affected design conditions are not changed. Missile, pressure, and fire doors are controlled in accordance with existing plant approved programs and the affected trains are returned to their normal configuration if Technical Specification limits are approached or an emergency exists. There is no increase in the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the USAP.

The temporary air moving equipment used for air circulation during normal plant operations when a class IE AC unit is inoperable will not create a seismic problem. This equipment is of low stature and light weight and will not cause damage to surrounding equipment important to safety. Opening various missile, pressure, and fire doors and controlling them in accordance with this procedure does not introduce a new type of accident. There is no possibility that an accident or malfunction of equipment important to safety of a different type than any evaluated previously in the USAR may be created.

The procedure monitors the temperature of the switchgear rooms and if the Technical Specification limit for the operable train is approached, the operating unit is returned to its normal cooling area configuration. This action will ensure that the limits are not exceeded for the operable system, thus ensuring no reduction in the margin of safety as defined by the Technical Specification bases.

SAFETY EVALUATION: 91-SE-012 Revision: 0

Emergency Diesel Generator Room Temperature Profile

Description:

This test procedure involves monitoring of the Emergency Diesel Generator (EDG) room temperature while the EDG Ventilation Supply Fan CGM01A or B is placed in the pull-to-lock position.

Safety Evaluation:

This test procedure limits the high temperature exposure to equipment in the EDC Room below the Technical Specification limits of 119 degrees F. If the room temperature reaches 115 degrees F, the ventilation system will be returned to normal operation. Therefore, allowing the EDG to operate with CGM01A or B in the PTL only when the room temperature is below Technical Specification limits will not have any adverse impact on the operability of the EDG or associated equipment.

The conditions of operability required by the Technical Specifications are not changed since the normal ventilation system will be made operable if the room temperature reaches the upper limit of 115 degrees F. Individually testing the A or B EDG does not degrade the status of the standby EDG nor increase the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the USAR.

EDG A and B are operated in accordance with existing procedures. All previously evaluated operating parameters remain unaffected. There is no possibility that an accident or malfunction of equipment important to safety of a different type than any evaluated previously in the USAR may be created.

The margin of safety as defined in the basis for any Technical Specification is not reduced.

SAFETY EVALUATION: 91-SE-013 Revision: 0

Temporary Jumper For NB01 Maintenance Outage Procedure

Description:

This procedure is used to keep selected cubicles energized from a non-class IE power source when maintenance work requires de-energization of the class IE NB01 electrical power division. The procedure uses three temporary jumper cables. The temporary cables run from welding receptacles to out-of-service IE distribution transformers XNG01A, XNG01B and XNG03C. These transformers consume 37 amps under full load and are protected by their normal 50 amp circuit breaker. The transformers provide 120 VAC power to their respective distribution panel circuits.

Safety Evaluation:

This condition is not adverse to system operation because if the non-IE system is lost, the equipment powered by the jumper will fail safe in the same manner as if it were powered from a E system. There is no increase in the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the USAR.

The possibility of a station blackout has not been created. The temporary cable runs are not over any equipment important to safety, rotating machinery, or high temperature components which could result in equipment malfunction or an adverse condition. There is no possibility that an accident or malfunction of equipment important to safety of a different type than any evaluated previously in the USAR may be created.

The operability of the operable division of IE power is not affected by the procedure actions. The margin of safety as defined in the basis for any Technical Specification is not reduced by these cable runs because the specified AC power sources and associated distribution systems remain operable.

SAFETY EVALUATION: 91-SE-014 Revision: 0

Containment Cooling Unit Performance Test Temporary Change

Description:

The subject procedure provides instructions for performance testing of the containment cooling units. This temporary change temporarily installs flow meters and pressure gauges on Containment Cooling Unit SGN01A to measure flow and pressure drop data. The installation of this test equipment is not reflected in the USAR, therefore, this test introduces a change to the Essential Service Water (ESW) and Containment Cooling Systems from their description in the USAR.

Test gauges are installed on drain valves using flexible hose so as not to rigidly couple the gauges to the containment cooling unit piping. The root valves will remain closed except when taking a reading, therefore seismicity and ESW inventory shall be maintained. The flow meter installed on the ESW piping weighs less than 10 pounds and does not affect the seismicity of the piping.

Safety Evaluation:

Operation of the ESW and Containment Cooling System is not degraded by the installation of test equipment per this procedure. The ability of the containment cooling units to cool and condense steam from the containment atmosphere following a design basis accident is not impaired by this procedure. There is no increase in the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the USAR.

This temporary change does not create any new challenges to equipment important to safety. There is no possibility that an accident or malfunction of equipment important to safety of a different type than any evaluated previously in the USAR may be created.

The margin of safety as defined in the basis for any Technical Specification is not reduced because operation of the ESW and Containment Cooling Systems has not been degraded.

SAFETY EVALUATION: 91-SE-C15 Revision: 0

Compressed Air System Temporary Modification

Description:

This temporary modification installs two temporary air dryer/filters and associated piping into the Compressed Air System (CAS). The original plant dryer/filters train is being taken out of service.

The quantity and quality of air the temporary dryer/filters are capable of producing meets the requirements of the Instrument Air System with no degradation to supplied system components. Testing of the air quality after the temporary dryer/filters are installed shall be conducted. Control Room indication of temporary dryer/filter train trouble alarms is provided.

Safety Evaluation:

The temporary equipment installed by this modification is not important to safety and has no safety design basis. The addition of the temporary air processing does not change the failure mode for instrument air operated valves. There is no increase in the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the USAR.

The location of the added temporary equipment is outside of the Auxiliary Building and is not over or near any equipment important to safety. There is no possibility that an accident or malfunction of equipment important to safety of a different type than any evaluated previously in the USAR may be created.

The margin of safety as defined in the basis for any Technical Specification is not reduced.

SAFETY EVALUATION: 91-SE-017 Revision: 0

Sampling System Isolation Valve Temporary Shielding

Description:

Temporary lead shielding was required to radiologically protect personnel near residual heat removal heat exchanger to Sampling System Isolation Valve EJ HV0015. An evaluation was performed to determine the acceptability of additional loading imposed by placing shielding on the valve.

In order to maintain valve operability and pressure boundary integrity of adjacent piping during a seismic event, the evaluation stipulated that: The shielding consists of lead blanket(s) not to exceed a total weight of 80 pounds; the shielding attaches securely to pipe supports and not to system piping; all adjacent piping supports remain operational; installation and removal of shielding is controlled by the applicable procedure; the shielding is removed after completion of maintenance activities.

Safety Evaluation:

The installation of this temporary shielding has been evaluated and installation requirements have been established to ensure that no equipment important to safety will be compromised. Therefore, there is no increase in the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the USAR.

There are no unique or different challenges to equipment important to safety nor is any unique degradation of this equipment caused by installation of the temporary shielding. Therefore, there is no possibility that an accident or malfunction of equipment important to safety of a different type than any evaluated previously in the USAR may be created.

The margin of safety as defined in the basis for any Technical Specification is not reduced.

SAFETY EVALUATION: 91-SE-018 Revision: 0

Motor Operated Valve Testing

Description:

This procedure revision incorporates additional valves into the Motor Operated Valve (MOV) test scope. The added valves are in the Essential Service Water (ESW) and Component Cooling Water (CCW) Systems. The ESW and CCW System valves tested in the procedure are inoperable during the test because of removal of their limit switch covers. The appropriate Technical Specification action is taken on the valve while it is inoperable. Pressure gauges installed maintain system pressure integrity and are not of significant mass to adversely affect the seismic qualification of these systems.

Safety Evaluation:

The ESW and CCW equipment will not be adversely affected by this test. Appropriate action statements are provided should the MOV fail during the performance of the test. There is no increase in the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the USAR.

There are no unique or different challenges to equipment important to safety created by MOV testing of the ESW and CCW System valves, nor is there any unique degradation to this equipment. There is no possibility that an accident or malfunction of equipment important to safety of a different type than any evaluated previously in the USAR may be created.

The cooling functions of the ESW and CCW Systems, as defined in the Technical Specification Bases, are not reduced by MOV testing of these systems. The plant is controlled within the acceptable limits of the Technical Specifications when MOV testing is performed. Therefore, the margin of safety as defined in the basis for any Technical Specification is not reduced.

SAFETY EVALUATION: 91-SE-019 Revision: 0

USAR Chapter 12 Change

Description:

This is a change in the frequency of processing personnel dosimetry (Thermoluminescent Devices) from monthly to quarterly.

Safety Evaluation:

This change does not affect plant equipment or plant operations. Previously evaluated accidents and malfunctions remain unaffected and the margin of safety defined in the bases for any Technical Specification is not reduced.

SAFETY EVALUATION: 91-SE-020 Revision: 0

Spent Fuel Pool Skimmer Pool Test Procedure

Description:

This test procedure measures flow and pump developed pressure for Spent Fuel Pool Skimmer Pump PEC03 to verify that the pump is operating per the manufacturer's pump curve. Pressure gauges and an ultrasonic flow meter are installed on the system to obtain this data. This temporary test equipment is not shown on the applicable USAR Figure, therefore this procedure introduces a change to the system from its description in the USAR.

Safety Evaluation:

Installation of temporary test equipment at the spent fuel pool skimmer pump on the non-seismic portion of the system does not interfere with normal operation of the system nor affect the initiation of any previously evaluated accident. There is no increase in the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the USAR.

This procedure causes no new challenges to equipment important to safety. There is no possibility that an accident or malfunction of equipment important to safety of a different type than any evaluated previously in the USAR may be created.

The margin of safety as defined in the basis for any Technical Specification is not reduced.

SAFETY EVALUATION: 91-SE-023 Revision: 0, 1

Essential Service Water Chemical Treatment Procedure

Description:

This procedure provides additional injection points and flexibility in connection fitting selection for chemically treating stagnant and low flow Essential Service Water (ESW) piping and components. The fittings and flex tubing connected to the injection valves maintain system operating pressure and seismicity.

Safety Evaluation:

This procedure does not adversely affect the operation of any equipment important to safety nor affect the initiators of previously evaluated accidents. Therefore, there is no increase in the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the USAR.

This procedure causes no new challenges to equipment important to safety. There is no possibility that an accident or malfunction of equipment important to safety of a different type than any evaluated previously in the USAR may be created.

The margin of safety as defined in the basis for any Technical Specification is not reduced since the ability of the ESW System and ultimate heat sink to provide a source of cooling water is not degraded by this procedure.

SAFETY EVALUATION: 91-SE-024 Revision: 0, 1

Microwave Transmitter And Receiver Installation

Description:

This temporary modification installs a microwave transmitter and receiver set to provide intrusion detection at the warehouse loading dock.

Safety Evaluation:

This temporary modification only affects plant security. There is no increase in the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the USAR.

No new challenges to equipment important to safety is created. There is no possibility that an accident or malfunction of equipment important to safety of a different type than any evaluated previously in the USAR may be created.

The margin of safety as defined in the basis for any Technical Specification is not reduced.

SAFETY EVALUATION: 91-SE-025 Revision: 0

Diesel Room Ventilation Supply Fan Shut Off Temporary Procedure

Description:

This temporary procedure provides for shutting off either Diesel Room Ventilation Supply Fan CGM01A or CGM01B before the room cools to 75 degrees F when the Emergency Diesel Generator (EDG) jacket water temperature is nearing its 135 degree F Technical Specification low temperature limit. The 85 degrees F high temperature fan start setpoint remains unchanged and the fan control handswitch remains in its "AUTO POSITION". Also, normal operation of the room heaters is unaffected by this temporary procedure.

Safety Evaluation:

This temporary procedure does not change the temperature limits in which the EDG ventilation supply fan operates. There is no increase in the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the USAR.

No new conditions are introduced. There is no possibility that an accident or malfunction of equipment important to safety of a different type than any evaluated previously in the USAR may be created.

The ventilation supply fans are maintained in their "AUTO POSITION" and allowed to start at their normal 85 degrees F temperature setpoint. The margin of safety as defined in the basis for any Technical Specification is not reduced.

SAFETY EVALUATION: 91-SE-026 Revision: 0

General Employee Training Requalification Extension

Description:

This procedure change provides for a maximum of 15 months between requalification training for General Employee Training (GET). The intent is to complete training annually, but this procedure change allows the Training Department to take an exception to the annual requirement when conflicts exist due to refueling outages or shift rotation. The procedure change does not change the intent of the original commitment since most training will continue to be completed in the annual cycle.

Safety Evaluation:

Although employee proficiency in GET topics is not directly related to the initiation of plant accidents and malfunctions or their mitigation, it may be indirectly related because of the emphasis on personnel errors and quality assurance principles. In any case, a three month extension for unusual circumstances will not affect the structures, systems, or components important to safety or operator response to accidents and malfunctions. Therefore, there is no increase in the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the USAR.

No plant equipment is directly affected by a three month extension to the annual GET retraining requirement. There is no possibility that an accident or malfunction of equipment important to safety of a different type than any evaluated previously in the USAR may be created.

Technical Specification margins of safety are not related to proficiency in GET topics. Therefore, the margin of safety as defined in the basis for any Technical Specification is not reduced.

SAFETY EVALUATION: 91-SE-027 Revision: 0

Shop Building Hydro-Pneumatic Tank Alternate Air Source Temporary
Modification

Description:

This temporary modification provides an alternate air source to the Shop Building Hydro-Pneumatic Tank via the Shop Service Air System. This is accomplished by removing relief valve 1WD514 and replacing it with a solenoid valve which is operated from control panel 1WD01J. System over-pressure protection is still provided by safety relief valve 1WD518.

Safety Evaluation:

The systems which are affected by this temporary modification serve no safety related function and have no safety design basis. Therefore, there is no increase in the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the USAR.

This change causes no new challenges to equipment important to safety. There is no possibility that an accident or malfunction of equipment important to safety of a different type than any evaluated previously in the USAR may be created.

The margin of safety as defined in the basis for any Technical Specification is not reduced.

SAFETY EVALUATION: 91-SE-028,29,31,32 Revision: 0

Diesel Generator Building Ventilation Supply Fan Setpoint Change

Description:

These procedure changes and corresponding Setpoint Change Requests increase the setpoint and reset for the automatic control of both trains of the Diesel Generator Building (DGB) ventilation supply fans. The changes ensure that the Diesel Generator jacket water system temperature does not fall below the low temperature setpoint. The USAR description of the DGB ventilation system states that the fans auto-start when room temperature exceeds 85 degrees F and auto-stop when the room temperature falls below 75 degrees F. The setpoint changes increase the auto-start setpoint to 90 degrees F and increase the auto-stop reset point to 85 degrees F.

Safety Evaluation:

The temperature control range of 85 to 90 degrees F has been chosen to be compatible with the supply and recirculation damper control setpoints. These setpoint changes will not impair the ability of the system to maintain the room temperature within the design limits of 60 to 122 degrees F. There is no increase in the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the USAR.

There is no possibility that an accident or malfunction of equipment important to safety of a different type than any evaluated previously in the USAR may be created.

The Technical Specifications require that the diesel generator rooms shall not exceed a temperature of 119 degrees F for a period of more than eight hours. Increasing the auto-start setpoint from 85 to 90 degrees F will not increase the probability of exceeding this Technical Specification temperature limit. The margin of safety as defined in the basis for any Technical Specification is not reduced.

SAFETY EVALUATION: 91-SE-033 Revision: 0

Laydown Pad Installation

Description:

This general modification request installs a laydown pad for storage of a spare reactor coolant pump (RCP) motor. The pad is poured concrete, 25 feet square and 1 foot thick, and is located east of the Fuel Building. The location of this pad is not reflected in the USAR, therefore this general modification constitutes a change to the plant area layout description in the USAR.

Safety Evaluation:

The installation of this storage pad is located in the yard area outside the power block and therefore has no effect on the operation of equipment important to safety or the initiators of any previously evaluated accidents. There is no increase in the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the USAR.

Installation of this storage pad does not create any new challenges to equipment important to safety. There is no possibility that an accident or malfunction of equipment important to safety of a different type than any evaluated previously in the USAR may be created.

The margin of safety as defined in the basis for any Technical Specification is not reduced.

SAFETY EVALUATION: 91-SZ-034 Revision: 0

Condensate Demineralizer System Manual Isolation Valve Installation

Description:

This temporary modification installs a manual isolation valve downstream of Cation Regeneration Tank Vent Valve AK HV304 in the Condensate Demineralizer System. Valve AK HV304 automatically vents the undiluted sulfuric acid transfer piping when acid transfer to the cation vessel is not in process. Valve AK HV304 has leakage past the seat which causes sulfuric acid to be discharged to the floor. Installation of a manual valve downstream of AK HV304 allows manual venting of the piping and precludes further spillage of sulfuric acid. Installation of this manual isolation valve constitutes a change to the USAR.

Safety Evaluation:

This temporary modification does not affect the operation of systems or components important to safety nor affect the initiators of previously evaluated accidents. Therefore, there is no increase in the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the USAR.

This change causes no new challenges important to safety. There is no possibility that an accident or malfunction of equipment important to safety of a different type than any evaluated previously in the USAR may be created.

The margin of safety as defined in the basis for any Technical Specification is not reduced.

SAFETY EVALUATION: 91-SE-035 Revision: 0

Secondary Liquid Waste System Valve Lineup Revision

Description:

The revised lineup allows Radwaste Evaporator Package SHB01 distillate and the portable radwaste vendor supplied demineralizer discharge to flow directly to Secondary Liquid Waste Monitor Tanks THF04A & B. This flow path bypasses Secondary Liquid Waste Charcoal Adsorber FHF01 and Demineralizer FHF02. The water in the monitor tanks is sampled to assure that proper chemistry and activity levels exist and then discharged to the environment.

Safety Evaluation:

The Secondary Liquid Waste System is not a safety related system and its failure does not prevent other safety related systems from performing their design function or prevent a safe shutdown of the reactor. There is no increase in the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the USAR.

The revision does not introduce conditions that would create an accident or malfunction of equipment important to safety of a different type than any evaluated previously in the USAR.

The margin of safety as defined in the basis for any Technical Specification is not reduced.

SAFETY EVALUATION: 91-SE-C36 Revision: 0

Reactor Coolant System Water Chemistry Limit Change

Description:

This USAR Change Request modifies the specified Reactor Coolant System (RCS) Water Chemistry Limits, to conform with the recommendations of the Standardized Nuclear Unit Power Plant System (SNUPPS) Chemistry Criteria and Specifications manual. These changes include increasing the RCS water chemistry limit for silica from 0.2 ppm to 1.0 ppm and adding a qualifying note which allows for deviation from normal hydrogen concentration 24 hours prior to scheduled plant shutdown.

Safety Evaluation:

These changes are made in accordance with manufacturers' recommendations and maintain adequate controls for protection of equipment against corrosion. These changes do not adversely affect system operations or any equipment important to safety. There is no increase in the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the USAR.

These changes cause no new challenges to equipment important to safety. There is no possibility that an accident or malfunction of equipment important to safety of a different type than any evaluated previously in the USAR may be created.

The margin of safety as defined in the basis for any Technical Specification is not reduced.

SAFETY EVALUATION: 91-SE-037 Revision: 0

Leak Repair Procedure

Description:

This procedure outlines the maintenance activities required to make a leak repair by injection (furmanite) to valve packing, flanged joints, etc., while the component is in-service or out-of-service.

Safety Evaluation:

This procedure does not apply to safety related equipment previously evaluated in the USAR. Therefore, there is no increase in the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the USAR.

There is no possibility that an accident or malfunction of equipment important to safety of a different type than any evaluated previously in the USAR may be created.

The activities outlined by this procedure do not interfere with any of the Reactor Protection or Engineered Safety Features Systems. The failure of any component repaired by this procedure would not change the margin of safety offered by these systems. Therefore, the margin of safety as defined in the basis for any Technical Specification is not reduced.

SAFETY EVALUATION: 91-SE-038 Revision: 0

Combustible Materials Permit 91-21

Description:

This Combustible Materials Permit allows for storage of two 55 gallon drums of Betz Slimicide C-74 in the Communications Corridor. Storage of this material introduces a fire loading of approximately 6000 BTU per square foot into this area. The combustible loading, as described in the USAR for fire area CC-1, reflects a loading of 0 BTU per square foot for this area. This permit allows a change to the facility from its description in the USAR in that it will allow for 6,000 BTU per square foot to be stored in this area.

Safety Evaluation:

The Communications Corridor (CC) is separated from the adjacent safety related areas of the Control Building by a 3-hour fire barrier. All cable and piping penetrations through the fire rated barriers are fitted with 3-hour rated penetration seals. Fire dampers will isolate heating, ventilation and air conditioning ducts between the CC and Control Building in case of fire. This position of the Communications Corridor is provided with a detection and automatic alarm system. A fire in this area cannot prevent safe shutdown because the area contains no safe shutdown equipment and is separated from the Control Building by a 3-hour barrier.

The consequences of a fire in the CC have not been increased by allowing the combustible material load to be increased to 6,000 BTU per square foot because fire spread into the Control Building has not been created. The operability of the penetration seals and fire dampers are not affected because the increased load does not alter their function nor compromise their fire resistance. The malfunction probability and the consequences thereof for equipment important to safety has not been increased because it is not threatened by the addition of 6,000 BTU per square foot fire loading in the CC. Therefore, there is no increase in the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the USAR.

Storing more combustibles than shown in the USAR for area CC-1 does not change the operation or configuration of equipment important to safety. There is no possibility that an accident or malfunction of equipment important to safety of a different type than any evaluated previously in the USAR may be created.

The margin of safety as defined in the basis for any Technical Specification is not reduced.

SAFETY EVALUATION: 91-SE-039 91-SE-040 Revision: 0

Reactor Coolant Drain Tank Valve Lineup Revision

Description:

The revised lineup allows the reactor coolant drain tank (RCDT) hydrogen cover gas pressure to be controlled manually rather than the automatic control discussed in the USAR. The valve lineup closes Containment Isolation Valves HE HV7126 & 7150 and opens Hydrogen Supply Valve HJ V023. This revision also affects the Nitrogen System normal valve lineup by changing the normal position of manual valve KH V098 from open to closed. This valve is on the hydrogen supply to the RCDT.

Safety Evaluation:

This valve lineup does not prevent any safety related system from performing its design function or prevent a safe shutdown of the reactor. The two containment isolation valves mentioned are in their safety position (closed) during normal plant operation and, therefore, no automatic action would be necessary in the event of a containment isolation signal. Overpressure protection for the RCDT is maintained. There is no increase in the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the USAR.

The RCDT performs no safety function. Operation of its hydrogen cover gas system in manual is within its design capabilities. There is no possibility that an accident or malfunction of equipment important to safety of a different type than any evaluated previously in the USAR may be created.

The margin of safety as defined in the basis for any Technical Specification is not reduced.

SAFETY EVALUATION: 91-SE-041 Revision: 0

Component Cooling Water Pumps A & C Inservice Pump Test Temporary Change

Description:

This temporary procedure change to the Component Cooling Water (CCW) Pumps A & C Inservice Pump Test installs a pressure gauge to measure the pressure drop across CCW Pump A Discharge Check Valve EG V003.

Safety Evaluation:

The pipe fittings, pressure gauge and flex hose connected at the vent connection maintains system design pressure. The seismicity of the vent line connection is not adversely affected. The vent isolation valve will only be opened to take a pressure reading and then will be returned to its normally closed position. With the vent valve remaining normally isolated, leakage from the system has not been increased and remains within the bounds of normal system design use.

There is no increase in the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the USAR.

This temporary change does not degrade the CCW Pumps in any way nor challenge the integrity of the piping. There is no possibility that an accident or malfunction of equipment important to safety of a different type than any evaluated previously in the USAR may be created.

The capability and capacity to provide cooling water is not degraded or impaired by this change. The margin of safety as defined in the basis for any Technical Specification is not reduced.

SAFETY EVALUATION: 91-SF-042 Revision: 0

Residual Heat Removal Pump Suction Flush Temporary Procedure

Description:

This temporary procedure provides the means to flush through a 2-inch globe valve on the suction piping of the "3" Residual Heat Removal (RHR) pump in an effort to reduce hotspot radiation levels at the valve. Flushing through the valve is accomplished by using a flange connection and drain hose at the valve connection for a brief period of time.

Safety Evaluation:

The initial conditions and assumptions of the previously evaluated accidents are not changed or altered, nor is the RHR equipment adversely affected by this flush procedure. Therefore, there is no increase in the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the USAR.

There is no possibility that an accident or malfunction of equipment important to safety of a different type than any evaluated previously in the USAR may be created.

The margin of safety as defined in the basis for any Technical Specification is not reduced.

SAFETY EVALUATION: 91-SE-044 Revision: 0

Reactor Coolant Pump Frame Vibration Monitoring Temporary Modification

Description:

This temporary modification defeats the horizontal frame vibration indication, alert, and alarm functions for Reactor Coolant Pump (RCP) D. This is being done to prevent nuisance alarms at the Main Control Board.

Bearing temperature indication, vertical horizontal shaft and frame vertical vibration indication alert and alarm functions remain available and have not been affected by the subject modification.

Safety Evaluation:

There are no trips or engineered safety features actuations from the RCP vibration instruments. These instruments are not essential to obtain or maintain a safe shutdown plant condition.

The existence or nonexistence of the vibration monitoring system for the RCPs does not affect the previously evaluated accident probabilities or the consequences thereof because this system does not affect the initial conditions or assumptions utilized in the assessment of these probabilities. The integrity of the RCS pressure boundary and the components which are important to safety which make up this boundary are not subject to any new or different variable which would increase the likelihood of their malfunction probabilities or consequences from that already evaluated.

The seismic, environmental, electrical and physical separation of equipment important to safety has not been changed by the temporary modification actions. There is no possibility that an accident or malfunction of equipment important to safety of a different type than any evaluated previously in the USAR may be created.

RCP vibration monitoring is not addressed by any Technical Specification. Therefore, the margin of safety as defined in the basis for any Technical Specification is not reduced.

SAFETY EVALUATION: 91-SE-045 Revision: 0

Portable Ventilation And Vacuum Unit Leak Testing

Description:

The test described in this procedure establishes a method used to leak test the high efficiency particulate air (HEPA) filters installed in the portable vacuum cleaners used in the Radiologically Controlled Area (RCA).

The performance of this procedure does not introduce a load demand on any system required for the safe shutdown of the plant. This test requires service 110 or 440 VAC power and service or instrument air which are not essential for safety related equipment.

Safety Evaluation:

This test does not place the vacuum cleaners in a loaded condition. The leak test is conducted with the vacuum cleaners during normal operation and does not require the alteration or restriction of safety related equipment. There is no increase in the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the USAR.

This test does not introduce any new parameters or load conditions that would create a different type of accident or malfunction of safety related equipment. Therefore, there is no possibility that an accident or malfunction of equipment important to safety of a different type than any evaluated previously in the USAR may be created.

Portable vacuum systems are not discussed in the Technical Specifications, nor does their operation during testing affect the margin of safety associated with any safety related system or component. Therefore, the margin of safety as defined in the basis for any Technical Specification is not reduced.

SAFETY EVALUATION: 91-SE-046 Revision: 0

Field Painting Procedure

Description:

This procedure provides guidance for painting in both safety and non-safety related areas (this procedure does not apply to painting inside containment).

Safety Evaluation:

Precautions are included for the protection of components in a manner that will not affect operability. There is no increase in the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the USAR.

Precautions are taken not to restrict, alter, or change in any way the operating parameters or conditions of a component or equipment. There is no possibility that an accident or malfunction of equipment important to safety of a different type than any evaluated previously in the USAR may be created.

The margin of safety as defined in the basis for any Technical Specification is not reduced.

SAFETY EVALUATION: 91-SE-047 thru -063 Revision: 0

Essential Service Water Emergency Makeup Procedures Changes

Description:

Plant Modification Request 02495 (previously discussed in 1990 submittal of same report) is installing an Atlas Copco air compressor in place of the present Ingersoll Rand unit, CKA01A. The present Essential Service Water (ESW) cooling flow requirement for CKA01A & B during normal shutdown and post Loss Of Coolant Accident (LOCA) operation is 30 gpm each. The Atlas Copco unit requires 40 gpm. The new air compressor will be placed in service before the system flow balance can be re-checked and adjusted.

These procedure changes will ensure that the present ESW flow balance will not be disturbed to the extent of being outside previous analysis in post-LOCA operation in the event A train ESW emergency makeup is required for the Steam Generators, Component Cooling Water System, or the Spent Fuel Pool. The maximum intermittent flow for these systems is 1120 gpm, 100 gpm, and 25 gpm, respectively. If one or more of these systems is receiving emergency makeup in the post-LOCA lineup, the procedure change would require that CKA01A be shut down (inferred by caution statement) if running and that it be prevented from running during the duration of the emergency makeup event. Cooling water is automatically shut off when the compressor is shut down. If no emergency makeup is occurring in post-LOCA operation, the 10 gpm additional flow required by CKA01A is not considered to significantly affect the present flow balance, therefore no action would be necessary.

Safety Evaluation:

The KA System air compressors are non-class IE, non-seismic category I devices and are not located in safety related buildings. CKA01A & B are powered from different class IE busses and are supplied by ESW during loss of offsite power conditions. Both compressors are shed from class IE busses on a safety injection signal, but may be realigned to their busses manually. Safety related pneumatically operated valves supplied by the compressed air system are either designed with backup N2 supply or are designed to fail in their safe position in the event of complete loss of instrument air.

Systems, structures, and components important to safety are not placed in an unsafe condition by removing CKA01A from service. There is no increase in the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the USAR.

There is no possibility that an accident or malfunction of equipment important to safety of a different type than any evaluated previously in the USAR may be created.

Safety margins are maintained by removing CKA01A from service since this action preserves the previous post-LOCA flow balance during emergency makeup. The margin of safety as defined in the basis for any Technical Specification is not reduced.

SAFETY EVALUATIONS: Revision: 0

Temporary Shielding Requests

Description:

Because of radiological concerns during implementation of the resistance thermal detector bypass removal project, several requests for temporary lead shielding have been written to place lead shielding on the Reactor Coolant System (RCS) piping, components, and branch connections to the RCS. The Safety Evaluations applicable include 91-0039 through 91-0050, 91-0052, 91-0054 through 91-0063, and 91-0161.

Evaluations were performed which showed that with the additional weight added, the subject supports, piping, and valves would remain within code allowable stresses and would meet the seismic requirements previously evaluated provided assigned shielding weight limits for each component were not exceeded.

Safety Evaluation:

The shielding is installed such that it remains in place during an accident and since the additional weight added by this shielding still meets all design requirements, there is no increase in the probability or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the USAR.

There are no new or different challenges to equipment important to safety caused by installation of the shielding. There is no possibility that an accident or malfunction of equipment important to safety of a different type than any evaluated previously in the USAR may be created.

The margin of safety as defined in the basis for any Technical Specification is not reduced.

SAFETY EVALUATION: 91-C011 Revision: 0

Essential Service Water Underground Repair

Description:

It has been identified that repair may be necessary because of interior wall corrosion in the Essential Service Water (ESW) System lines. This modification facilitates the repair program for the underground portion of the ESW System piping. The modification consists of installing four new concrete access vaults, two each for train A and B, and installing bolted flanges, spool pieces, and drain and vent valves in the Ultimate Heat Sink (UHS) supply and return lines of both trains at the locations of the new vaults.

Safety Evaluation:

Installation of the access vaults may be performed when the plant is in full power operations, within the limitations described in the safety evaluations. Construction practices (seismic II/I designed temporary shoring) used will prevent any adverse effects from construction of the vaults on the piping of either train and also on the existing, adjacent structures. One or both vaults for the same train of piping only shall be worked on at a time.

During excavation for the vaults, administrative controls are established to ensure that the continued function of the ESW train being worked is maintained. At the end of each workday, a temporary cover is provided over the excavation area to provide protection from the design basis missile loading. The temporary missile covers are designed as Category I structures.

The underground ESW piping has previously been designed as fully supported by the ground. The construction of the new vaults renders the pipes unsupported for a maximum distance of 20 feet. The pipes have been evaluated for the unsupported length for both conditions, i.e. with and without the piping modifications, for all applicable design loads. The pipe stresses remain within the ASME Code allowables. Therefore no new supports are required for the pipes in the vaults.

The effects of cold weather on the portions of the piping that will be permanently exposed in the new vaults have been evaluated. The vault roofs and walls, to below the frost depth, are insulated to minimize heat exchange between the inside and the outside of the vaults. All roof joints are sealed to minimize leakage of the outside air into the vaults. The analysis shows that the piping temperature will remain above freezing during extreme winter conditions. As an additional protection, local temperature monitoring instrumentation is provided on the outside of the vaults for the purpose of monitoring the temperature inside the vaults during the cold weather without entering the vaults.

The concrete vaults are structurally adequate for the condition of complete flooding of the inside of the vaults and their long term integrity is also not affected due to flooding. The insulation used on the concrete roof and walls is manufactured from styrene foam material which will not be damaged by wetness caused by any incoming or leaking water. The pipes have been evaluated for the external pressure loading that would result on them from complete flooding of the vaults and are found to be adequate. The stresses in the pipes from this condition remain within ASME code allowables. In order to avoid any adverse effects on the long term operation of the system, water level monitoring and water removing facilities are provided on the outside of

the vaults.

During implementation of the piping modifications, the associated ESW train will not be capable of fulfilling its safety functions, as described above. Therefore, the piping modifications shall be performed during plant shutdown and when only one operable train of ESW System is needed to support the plant.

The modification to the ESW System is in accordance with ASME Code and the concrete vaults that house the piping are designed as Category I structures. The safety design basis relating to structural integrity, function, and operability of the ESW System is unaffected by this modification. There is no increase in the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the USAR.

This modification has been evaluated for all relevant hazards to the affected ESW piping. The underground portion of the ESW piping has been evaluated to ASME consistent with the original design. There is no possibility that an accident or malfunction of equipment important to safety of a different type than any evaluated previously in the USAR may be created.

The margin of safety as defined in the basis for any Technical Specification is not reduced.

SAFETY EVALUATION: 91-0030 Revision: 0

Temporary Backup Nitrogen Source Installation

Description:

This temporary modification provides an additional source of pneumatic energy as a backup to the normal instrument air to the residual heat removal (RHR) heat exchanger flow control valves. This is accomplished by supplying, if needed, nitrogen from a high pressure nitrogen bottle.

Safety Evaluation:

Providing a back up source of pneumatic energy to operate RHR control valves if a loss of instrument air occurs does not increase the frequency at which the RHR equipment is actuated, alter the function of any RHR equipment, nor degrade the operability of any RHR equipment. There is no increase in the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the USAR.

The failure mode, upon loss of instrument air of the subject valves, is open. This failure position is maintained by the modification. The seismicity of the subject valves is not affected by installing, if needed, the additional pneumatic energy source. There is no possibility that an accident or malfunction of equipment important to safety of a different type than any evaluated previously in the USAR may be created.

Decay heat removal is maintained. The margin of safety as defined in the basis for any Technical Specification is not reduced.

SAFETY EVALUATION: 91-0031 91-0111 Revision: 0

Accumulator Inservice Check Valve Test Procedure Change

Description:

This is a correction to a previously completed safety evaluation for a procedure which governs inservice testing of the Emergency Core Cooling System accumulator safety injection check valves. The accumulator pressures were incorrectly stated. There was no change to the remainder of the evaluation. The subject test involves quantifying over a period of time the discharge flow out of the accumulator instead of observing flow through a test line and instruments.

Safety Evaluation:

The actions of the procedure do not put any system component or piping in a condition outside of its design parameters nor create a flow path which could cause a loss of coolant. There is no increase in the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the USAR.

There is no possibility that an accident or malfunction of equipment important to safety of a different type than any evaluated previously in the USAR may be created.

This test is conducted when the plant is in Mode 6, Refueling, while the accumulators are not required to be operable. The margin of safety as defined in the basis for any Technical Specification is not reduced.

SAFETY EVALUATION: 91-0032 Revision: 0

Incore Thermocouple USAR Description Change

Description:

This USAR change updates the description of the incore thermocouples to more accurately describe their function. The USAR lists the thermocouples as non-safety related but they supply information to the safety related core subcooling monitor. Therefore, the change involves listing the thermocouples as safety related.

Safety Evaluation:

This change does not involve any field modifications and is simply a clarification of the original function. There is no increase in the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the USAR.

There is no possibility that an accident or malfunction of equipment important to safety of a different type than any evaluated previously in the USAR may be created.

The margin of safety as defined in the basis for any Technical Specification is not reduced.

SAFETY EVALUATION: 91-0033 Revision: 0

Valve Pit Dirt Replacement

Description:

This modification removes 12-inches of soil around the Essential Service Water (ESW) System valve pits and replaces it with crushed rock.

Safety Evaluation:

The area modified is outside of the power block. This modification does not affect the operation of any equipment required for plant shutdown or accident mitigation. Therefore, there is no increase in the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the USAR.

This change in surface texture does not introduce any significant change to the storm drainage analysis in the USAR nor does it create any new challenges to equipment important to safety. There is no possibility that an accident or malfunction of equipment important to safety of a different type than any evaluated previously in the USAR may be created.

The margin of safety as defined in the basis for any Technical Specification is not reduced.

SAFETY EVALUATION: 91-0034 Revision: 0

Steam Generator Level Temporary Emulation

Description:

This temporary modification emulates normal steam generator (S/G) levels on 3 of the 4 channels of each loop. This is accomplished by placing a resistor at each instrument's input test jack in the 7300 process protection cabinets, which gives the voltage value to emulate normal S/G levels. One instrument channel is not emulated in order to provide actual S/G level indication to the Control Room operators.

This temporary modification's installation and existence is limited to plant Modes 4 Hot Shutdown, 5 Cold Shutdown and 6, Refueling because Reactor Trip and Aux Feedwater Actuation Signals are defeated. In Modes 4, 5 and 6, this function is not required because the reactor is tripped and the plant is cooled down with Tave <350 degrees F. Feedwater requirements are minimal and not required for emergency needs in these plant modes.

Safety Evaluation:

Placing the resistor across the input test jack of the S/G level instruments in the process cabinets does not degrade the class IE integrity of the cabinet or affect any other cabinet function. There is no increase in the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the USAR.

The level instruments are the only equipment affected and their operation will be tested upon return to service prior to Mode 3 entry following the outage. During the time the modification is in place, the seismic and environmental qualification of the equipment important to safety is not degraded or adversely affected. There is no possibility that an accident or malfunction of equipment important to safety of a different type than any evaluated previously in the USAR may be created.

Technical Specification for this change applies only while in Modes 1, Power Operation, 2, Startup, and 3, Hot Standby; therefore, defeating the subject functions while in Modes 4, 5 and 6 does not reduce the margin of safety as defined by the basis for any Technical Specification.

SAFETY EVALUATION: 91-0035 Revision: 0

Integrated Leakage Rate Test Depressurization With Containment Purge System

Description:

This procedure governs operation of the Containment Purge System to depressurize Containment following the Integrated Leakage Rate Test (ILRT). This vent path is in addition to the primary vent path through the pressurization system piping, and it shortens the depressurization time by about four hours.

To protect the Auxiliary Building ducts from overpressurization, an orifice plate, made of 1/4-inch thick steel with a six inch bore, is installed in place of the mini purge exhaust inlet screen. This orifice is similar in size to the six inch containment penetration piping of the pressurization system and opening this vent path approximately doubles the depressurization rate and halves the remaining depressurization time.

Safety Evaluation:

Use of this procedure does not challenge component integrity or prevent the dampers from responding to a containment purge isolation signal or manual closure. There is no increase in the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the USAR.

The integrity of the containment isolation valves and penetration piping are not challenged by this procedure. There is no possibility that an accident or malfunction of equipment important to safety of a different type than any evaluated previously in the USAR may be created.

The margin of safety as defined in the basis for any Technical Specification is not reduced.

SAFETY EVALUATION: 91-0036 Revision: 0

PA01 Bus Outage Temporary Power

Description:

This procedure provides instructions for the installation of temporary power feeds to equipment needed during 13.8 kV bus (PA01) outages for maintenance work. The procedure controls the size of the temporary power conductors, the portable generator grounding cable size and the terminating hardware used on the temporary conductors. Precautions are provided which cover temporary cable routing and bend radius.

Safety Evaluation:

None of the equipment is safety related or is required to bring the plant to a safe shutdown condition. None of the power systems involved, including the temporary power sources, are class IE. There is no increase in the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the USAR.

The result of a temporary cable failure would be limited to the possibility of a fire in the room. All rooms associated with this procedure have a previously evaluated fire analysis. There is no possibility that an accident or malfunction of equipment important to safety of a different type than any evaluated previously in the USAR may be created.

The margin of safety as defined in the basis for any Technical Specification is not reduced.

SAFETY EVALUATION: 91-0037 Revision: 0

Emergency Diesel Generator Testing USAR Change

Description:

This USAR change provides a different test schedule of the Emergency Diesel Generators (EDG) using the description in the Technical Specifications.

Safety Evaluation:

This change has no adverse effects on the operation of the EDG. The change increases the test frequency thereby providing additional test data upon which to judge EDG reliability. There is no increase in the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the USAR.

There is no possibility that an accident or malfunction of equipment important to safety of a different type than any evaluated previously in the USAR may be created.

The margin of safety as defined in the basis for any Technical Specification is not reduced.

SAFETY EVALUATION: 91-0038 Revision: 0

Radioactive Waste Management USAR Change

Description:

This USAR change provides a clarification of Dilution Factors, Release Points, calibration and maintenance of monitors, and describes the vendor services being used at the plant.

Vendor services are being utilized to clean contaminated laundry which helps to prevent the spread of highly contaminated particles through the laundry water systems. Vendor services are also used to process portions of the Liquid Waste Process System products.

Safety Evaluation:

The activities and services which are being provided by vendors must meet the same criteria as required by Wolf Creek. The subject USAR changes do not change any setpoints or release points at the plant nor increase any release source alarm factors. No new discharge or release to the environment has been established. Therefore, there is no increase in the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the USAR.

All changes in this USAR change meet previously established rules and regulations. The changes do not imply or describe any new or different ways plant equipment is used. There is no possibility that an accident or malfunction of equipment important to safety of a different type than any evaluated previously in the USAR may be created.

The margin of safety as defined in the basis for any Technical Specification is not reduced.

SAFETY EVALUATION: 91-0065 91-0072 Revision: 0

Mixed Bed Demineralizer Resin Change

Description:

This is a USAR and procedure change to allow use of an ion exchange resin in the Chemical Volume Control System (CVCS) mixed bed demineralizers which employs a cation resin of the hydrogen form rather than the previously used lithium form. Use of the hydrogen form resin during plant cooldown and outage cleanup provides a more efficient removal of activated corrosion products and fission products from the Reactor Coolant System (RCS). A strong acid cation resin of the hydrogen type can easily split salts which the weaker types cannot readily do. The effect of the use of this type of mixed bed unit will be to lower pH while attaining a higher bed decontamination factor.

Safety Evaluation:

The use of the hydrogen form resin does not affect the reactor coolant pressure boundary or the CVCS in any mode. Required chemistry limits are maintained to ensure the structural integrity of the RCS. There is no increase in the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the USAR.

There is no possibility that an accident or malfunction of equipment important to safety of a different type than any evaluated previously in the USAR may be created.

Use of the hydrogen form resin does not prevent plant chemistry from being controlled in ranges required by the Technical Specifications. The margin of safety as defined in the basis for any Technical Specification is not reduced.

SAFETY EVALUATION: 91-0067 Revision: 0

Instrument And Service Air Compressor Manual Operation

Description:

This temporary procedure places Instrument and Service Air Compressor CKA01A in service and manually starts compressors B & C. Compressors B & C operate in an unloaded condition but running to ensure standby functions are maintained.

Safety Evaluation:

This configuration does not diminish the quality, quantity, or pressure of air supplied to plant loads nor does it significantly affect system operation. There is no increase in the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the USAR.

Equipment operated by this air is not subjected to a different mode of failure because normal air parameters are maintained. There is no possibility that an accident or malfunction of equipment important to safety of a different type than any evaluated previously in the USAR may be created.

The margin of safety as defined in the basis for any Technical Specification is not reduced.

SAFETY EVALUATION: 91-0069 91-0071 Revision: 0

Residual Heat Removal Pump Room Temporary Shielding

Description:

Because of radiological concerns during application of decontamination coating, temporary lead shielding was required in Residual Heat Removal (RHR) Pump Rooms A & B. The addition of the shielding was determined to be acceptable provided assigned shielding weight limits for each component were not exceeded.

Safety Evaluation:

The shielding does not affect active system or component response. There is no increase in the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the USAR.

The shielding does not challenge the integrity of any safety related equipment. There is no possibility that an accident or malfunction of equipment important to safety of a different type than any evaluated previously in the USAR may be created.

The margin of safety as defined in the basis for any Technical Specification is not reduced.

SAFETY EVALUATION: 91-0070 Revision: 0

Essential Service Water Crosstie Valve Leak Test Procedure

Description:

This procedure quantifies the leakage through the Essential Service Water/Service Water (ESW/SW) Systems crosstie butterfly valves. In measuring this leakage, pressure gauges and a drain hose are temporarily installed on the systems.

Safety Evaluation:

The commercial pipe fittings, pressure gauges and flex hose connected at the various connections maintain system design pressure. The isolation valves are only opened to take a pressure reading or to quantify the leakage flow and then returned to their normally closed position. Therefore, leakage from the system is not increased because the system valves remain closed unless in active use by test personnel. There is no increase in the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the USAR.

The seismic, environmental, and class IE qualifications of the ESW equipment is not introduced to a unique factor or influence which could create an accident or malfunction of equipment important to safety of a different type than any evaluated previously in the USAR.

The capability and capacity to provide cooling to the plant's heat loads have not been degraded or impaired. The margin of safety as defined in the basis for any Technical Specification is not reduced.

SAFETY EVALUATION: 91-0074 91-0091 Revision: 0

Essential Service Water Flow Balance Temporary Procedure

Description:

These temporary procedures perform a post Loss-Of-Coolant-Accident balance for the Essential Service Water (ESW) System. The emergency makeup to the Auxiliary Feedwater, Spent Fuel Pool, and Component Cooling Water Systems is simulated by providing a flow through the suction piping to the turbine driven auxiliary feedwater pump. The flow path is established by removing the pump suction strainer spool piece and installing a temporary adapter bolted to the piping flange with temporary piping routed outside the building to the storm drains. The procedures also install pressure gauges, chemical addition taps and a jumper hose.

Safety Evaluation:

The procedures are only performed in plant Modes 5, Cold Shutdown, 6 Refueling and No Mode. The temporary piping is installed with sufficient supports and braces to ensure that no strain is placed on the permanent suction piping or supports. Potential leakage from the gauge and hose connections following a seismic event will not degrade the ability of the ESW System and ultimate heat sink to provide cooling to essential components. There is no increase in the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the USAR.

The procedures do not create any new or different challenges to equipment important to safety. There is no possibility that an accident or malfunction of equipment important to safety of a different type than any evaluated previously in the USAR may be created.

The margin of safety as defined in the basis for any Technical Specification is not reduced.

SAFETY EVALUATION: 91-0076 Revision: 0

USAR Emergency Lighting Clarification

Description:

This is a USAR change that clarifies a commitment related to emergency lighting as stated in the USAR text. The USAR states that "emergency lighting is designed to provide lighting at all times in areas used during shutdown or emergency." This USAR change changes it to "The emergency lighting system is designed to provide lighting in areas used during safe shutdown, design basis events or fire fighting activities."

Safety Evaluation:

The emergency lighting system has no safety design basis. The change to the wording in the USAR text does not affect the ability to provide lighting to the area above the main control board and operators' console upon loss of non-class 1E AC power or to evacuate the Control Room and man the control panels outside the Control Room to enable a safe shutdown condition or to support fire fighting activities.

There is no increase in the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the USAR.

There is no possibility that an accident or malfunction of equipment important to safety of a different type than any evaluated previously in the USAR may be created.

The margin of safety as defined in the basis for any Technical Specification is not reduced.

SAFETY EVALUATION: 91-0077 91-0078 Revision: 0

Nuclear Plant Reliability Data System Clarification

Description:

These changes relate to a change to the Nuclear Plant Reliability Data System (NPRDS) procedure and to the section applicable to NPRDS in the USAR to clarify and more accurately describe the NPRDS program at Wolf Creek. The changes reflect that the NPRDS program prepares component failure analysis reports and distributes this information to applicable groups; it does not have the capability to provide corrective measures.

Safety Evaluation:

Clarifying the USAR text and changing the NPRDS description in the procedure does not increase the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the USAR.

These text related changes do not affect any operating procedures. There is no possibility that an accident or malfunction of equipment important to safety of a different type than any evaluated previously in the USAR will be created.

The NPRDS is not addressed by any Technical Specifications. The margin of safety as defined in the basis for any Technical Specification is not reduced.

SAFETY EVALUATION: 91-0079 Revision: 0

Gaitronics Temporary Installation Procedure

Description:

This procedure provides instructions for installing and removing temporary gaitronics stations at various locations in the power block, support buildings, yard areas, and temporary trailers. The temporary stations installed by this procedure are not reflected in the USAR and therefore constitutes a change to the USAR description.

Safety Evaluation:

All temporary equipment used by this procedure meets all applicable requirements. Operation of the Public Address System is not adversely affected by this procedure. Cable separation is maintained between temporary cables and permanent equipment. The equipment and cables are secured to ensure movement towards safety related equipment does not occur.

The Public Address System does not provide a safety related function. There is no increase in the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the USAR.

Installation of temporary equipment is controlled to ensure that other plant equipment is not affected. Therefore, there is no possibility that an accident or malfunction of equipment important to safety of a different type than any evaluated previously in the USAR may be created.

The margin of safety as defined in the basis for any Technical Specification is not reduced.

SAFETY EVALUATION: 91-0060 91-0064 Revision: 0

Performance Improvement Request Procedure Change

Description:

This procedure change involves a change of the Programmatic Deficiency Report to the Performance Improvement Request (PIR). Besides changing the program title, supervisor responsibilities and a definition were added. The change also provides a clarification of the types of problems to be documented on the PIR. The second safety evaluation applies to the USAR change.

Safety Evaluation:

This change is for company wide non hardware problem reporting and the administrative controls associated with it. The program change enhances managements awareness of problems. There is no increase in the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the USAR.

There is no possibility that an accident or malfunction of equipment important to safety of a different type than any evaluated previously in the USAR may be created.

The margin of safety as defined in the basis for any Technical Specification is not reduced.

SAFETY EVALUATION: 91-0081 Revision: 0

Floor And Equipment Drain Piping Pressure Test Procedure

Description:

This procedure demonstrates the integrity of the pressure retaining components of the Floor and Equipment Drain System Piping between Control/Auxiliary Building sumps to floor drain tank upstream and downstream isolation valves. For this pressure test, a temporary pressure gage is installed at a drain line connection.

Safety Evaluation:

The flex hose, commercial pipe fittings, and temporary gage connected to the drain line maintain system operating pressure. The flex hose does not rigidly couple the gage load to the system piping. The drain line valve is only opened to take pressure readings and then restored to its normally closed position. There is no increase in the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the USAR.

The seismicity of the drain lines is not compromised by the instrumentation. No unique or different failure is introduced by installing a temporary gage. Since the equipment is not affected by this modification, there is no possibility that an accident or malfunction of equipment important to safety of a different type than any evaluated previously in the USAR may be created.

The reliability, capability, and integrity of the system in collecting liquid waste from the plant during accident conditions is not degraded by this modification. The margin of safety as defined in the basis for any Technical Specification is not reduced.

SAFETY EVALUATION: 91-0083 Revision: 0

Movable Segmented Shield Installation

Description:

This modification installs a movable segmented shield for radiation protection of personnel during dewatering of spent resins in shipping casks.

Safety Evaluation:

In the event of a spill of resin slurry or decant water, existing curbs or temporary barriers will contain the liquid release. Additionally, this change does not affect any equipment important to safety. There is no increase in the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the USAR.

There is no possibility that an accident or malfunction of equipment important to safety of a different type than any evaluated previously in the USAR may be created.

The margin of safety as defined in the basis for any Technical Specification is not reduced.

SAFETY EVALUATION: 91-0084 Revision: 0

Letdown Delay Pipe Temporary Shielding

Description:

Because of radiological concerns, temporary lead shielding was required around the Chemical and Volume Control System Letdown Delay Pipe. An evaluation revealed that with the additional weight added, the subject supports, piping, and valves would remain within code allowable stresses and would meet the seismic requirements previously evaluated provided assigned shielding weight limits for each component were not exceeded.

Safety Evaluation:

The shielding is installed such that it remains in place during a seismic event and the additional weight added by this shielding still meets all design requirements. Therefore, there is no increase in the probability or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the USAR.

There are no new or different challenges to equipment important to safety caused by installation of the shielding. There is no possibility that an accident or malfunction of equipment important to safety of a different type than any evaluated previously in the USAR may be created.

The margin of safety as defined in the basis for any Technical Specification is not reduced.

SAFETY EVALUATION: 91-0085 Revision: 0

Main Transformer Fire Protection Unit Trip Interlock Temporary
Disablement

Description:

The main transformers (A, B and C phases) are protected from a fire event by the Fire Protection System. The main transformers are automatically deenergized upon actuation of the water spray system to prevent damage to the transformer bushings. To avoid inadvertent spray system actuations and spurious transformer trips, dual zone detection is provided for these transformers. Detection by both zones trips the deluge valve and deenergizes the transformer. This temporary modification defeats the signal to deenergize main transformer C while troubleshooting the Fire Protection System for the cause of recent spurious alarms.

Safety Evaluation:

The main transformers are non-safety related site structures. The main transformers are remotely located from safety related structures, and as such, a postulated fire within these zones does not pose a hazard to structures and systems required for safe shutdown. There is no increase in the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the USAR.

There is no possibility that an accident or malfunction of equipment important to safety of a different type than any evaluated previously in the USAR may be created.

The margin of safety as defined in the basis for any Technical Specification is not reduced.

SAFETY EVALUATION: 91-0088 Revision: 0

Accumulator Inleakage Temporary Troubleshooting Procedure

Description:

This is a temporary procedure for determining if inleakage observed into Accumulator Tank TEP01A is coming from the normally closed valves on the accumulator fill line. This is accomplished by closing normally locked open Fill Line Manual Isolation Valve EP V009 and trending tank level.

Safety Evaluation:

The procedure provides for re-opening EP V009 if the tank level begins to decrease and it becomes necessary to fill the tank. The valve is safety related because failure of the valve pressure boundary could render the accumulator incapable of performing its safety function. However, the valve performs no active function in the mitigation of any accident, it is locked open to ensure that accumulator filling operations can be performed from the Control Room without delay if level decreases are experienced from minor leakage or routine sampling.

The valve is designed to be closed, if necessary, for system maintenance, rework or leakage. This is covered in general by the USAR. Closing the manual isolation valve does not increase the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the USAR.

The valve is safety related for pressure boundary only. Closing it does not produce circumstances that would create an accident or malfunction of equipment important to safety of a different type than any evaluated previously in the USAR.

The margin of safety as defined in the basis for any Technical Specification is not reduced.

SAFETY EVALUATION: 91-0090 Revision: 0

Head Assembly Conoseal Temporary Shielding

Description:

Because of radiological concerns during replacement of the thermocouples at the reactor pressure vessel head assembly conoseal locations, each of four conoseal thermocouple locations required temporary lead shielding. An evaluation revealed that the additional weight imposed on the shroud and zip lift rail does not exceed the design requirements of these components.

Safety Evaluation:

The added weight of the shielding does not compromise any equipment important to safety, nor does the weight compromise reactor pressure vessel integrity during a seismic event. There is no increase in the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the USAR.

There is no possibility that an accident or malfunction of equipment important to safety of a different type than any evaluated previously in the USAR may be created.

The margin of safety as defined in the basis for any Technical Specification is not reduced.

SAFETY EVALUATION: 91-0092 thru 0110 Revision: 0

On-Line Relief Valve Testing Procedure

Description:

These vendor procedures verify the set pressure of relief valves by lifting them slightly off their seat. The relief valves are tested by the Trevitest method which has been used within the nuclear industry while the system is in normal operation. The relief valves tested by the subject procedure are on the shell side of a feedwater heater in the feedwater heater extraction drains and vents system.

Safety Evaluation:

If the valve goes full open and is stuck full open or fails to fully reset for some unlikely reason, the effect on plant operation would be insignificant and well within the previous analyses of a feedwater system malfunction that would result in a decrease in feedwater temperature, excessive increase in secondary steam flow or inadvertent opening of a steam generator relief or safety valve.

This test method does not interfere with the ability of the relief valve to protect the system against an overpressurization event. There is no increase in the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the USAR.

No equipment important to safety is degraded or challenged by testing the applicable relief valves. There is no possibility that an accident or malfunction of equipment important to safety of a different type than any evaluated previously in the USAR may be created.

The margin of safety as defined in the basis for any Technical Specification is not reduced.

SAFETY EVALUATION: 91-0112 Revision: 0

Main Condenser Chemical Cleaning Temporary Procedure

Description:

This temporary procedure pre-conditions (chemically cleans) the main condenser's circulating water tubes using Betz DE1762, a mild, non-toxic chemical which dissolves carbonate scale.

In order to inject the chemical, installation of a flange and threaded nipple on the circulating waterbox drain standpipe is necessary. This flange connection is equipped with appropriate check and isolation valves. Additionally, a vent hose is attached to each waterbox's atmospheric vent and routed out to chemical trailers for venting off carbon dioxide which is created by the cleaning process.

Safety Evaluation:

Installation and use of the equipment for chemically cleaning the main condenser does not affect the previously evaluated flooding analysis. The equipment is not installed on any safety related equipment. Therefore, there is no increase in the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the USAR.

The carbon dioxide created by the cleaning process does not introduce any adverse affects to Control Room habitability. There is no possibility that an accident or malfunction of equipment important to safety of a different type than any evaluated previously in the USAR may be created.

The margin of safety as defined in the basis for any Technical Specification is not reduced.

SAFETY EVALUATION: 91-0113 thru 0132 Revision: 0

On-Line Safety Valve Testing Procedure

Description:

These vendor procedures verify the set pressure of safety valves by lifting them slightly off their seat. While the system is in normal operation, the valves are tested by the Truvitest method which has been used within the nuclear industry. The safety valves tested by the subject procedure are on the safety related portion of the main steam line in the Main Steam System.

Safety Evaluation:

If the valve goes fully open and is stuck full open or fails to fully reset for some unlikely reason, the effect on plant operation would be within the previous analyses of an inadvertent opening of a steam generator relief or safety valve evaluated in the USAR.

This test method does not interfere with the ability of the safety valve to protect the system against an overpressurization event. Attachment of the testing device on the valve does not adversely affect the seismic ability of the valve. There is no increase in the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the USAR.

Testing the subject valves does not change the performance, setpoints, or seismic qualification of them or introduce them to a unique variable which could create an accident or malfunction of equipment important to safety of a different type than any evaluated previously in the USAR.

The function of ensuring that the secondary system pressure is limited to within 110% of its design pressure during the most severe operational transient is not compromised by this testing. The margin of safety as defined in the basis for any Technical Specification is not reduced.

SAFETY EVALUATION: 91-0133 Revision: 0

Mini Purge Exhaust Fan Unit Temporary Power

Description:

This procedure change provides instructions for the connection of temporary power to Mini Purge Exhaust Fan Unit (CG702). This is necessary during its bus outage and the performance of a Containment Integrated Leak Rate Test. The procedure controls the size of the temporary power conductors and the terminating hardware used on the temporary conductors. Precautions are provided which cover temporary cable routing and bend radius.

Safety Evaluation:

Neither Motor Control Center associated with this temporary power connection is class IE or is required to bring the plant to a safe shutdown condition. Additionally, the temporary cabling is not attached to safety related conduit and is not run in any safety related raceway. There is no increase in the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the USAR.

There is no possibility that an accident or malfunction of equipment important to safety of a different type than any evaluated previously in the USAR may be created.

The margin of safety as defined in the basis for any Technical Specification is not reduced.

SAFETY EVALUATION: 91-0134 Revision: 0

Auxiliary Building And Control Room Pressure Test Temporary
Procedure Change

Description:

This temporary procedure change allows the removal of access covers on the Normal Control Building Supply Air System. The purpose of this one time change is to evaluate a condition discovered where access doors were inadvertently left open on the Supply Ventilation System.

This change verifies the ability of the Emergency Exhaust System (EES) to maintain the Auxiliary Building at a negative pressure of less than or equal to 1/4-inch water gauge (w.g.) relative to outside atmosphere. At the same time, the Control Room attempts to maintain a positive pressure of 1/4-inch w.g., while the access door on Dampers GKD300, GKD279, GKD310 and GKD002 are left open. Test personnel are stationed next to these subject dampers to replace the access doors, if so requested. Therefore, no adverse impact on the operability of the EES exists.

Safety Evaluation:

Test personnel are assigned to the damper covers under the direct auspices of the Control Room and will close the access covers when directed by Control Room personnel, if a Safety Injection Signal, Fuel Building Isolation Signal or Control Room Ventilation Isolation Signal is initiated. There is no increase in the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the USAR.

The only physical change to plant equipment is temporary removal of the damper access covers. This action is conducted with personnel staged next to the dampers for quick response, if requested. There is no possibility that an accident or malfunction of equipment important to safety of a different type than any evaluated previously in the USAR may be created.

The margin of safety as defined in the basis for any Technical Specification is not reduced.

SAFETY EVALUATION: 91-0135 Revision: 0

DC Ground Location Temporary Procedure

Description:

This temporary procedure provides the means for locating grounds on the DC systems. The procedure places a small pulsed DC current signal on an operable DC bus by using a DC scout. A closed circuit is established through which a current can be pulsed by the DC scout. A systematic approach of noting where pulses have and have not been detected at various points along the current path pinpoints the ground fault location.

Safety Evaluation:

This technique does not degrade the operability of the DC systems. Components are not subjected to an excessive or degraded voltage because of the small DC pulse current in the circuit. There is no increase in the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the USAR.

The physical, electrical, environmental and seismic qualification features of the class IE electrical subsystems are maintained and not impaired or degraded by the procedure actions. There is no possibility that an accident or malfunction of equipment important to safety of a different type than any evaluated previously in the USAR may be created.

The integrity, reliability, and capacity of the class IE DC systems remains unaffected. The margin of safety as defined in the basis for any Technical Specification is not reduced.

SAFETY EVALUATION: 91-0136 91-0240 Revision: 0

Essential Service Water/Service Water Normal Mode Flow Verification
Temporary Procedure

Description:

This temporary procedure verifies normal mode flows to Essential Service Water (ESW) System components and measures piping header flows to Service Water (SW) System components. Additionally, a jumper hose is installed by this procedure at the "B" air compressor to simulate increased cooling water flow.

During normal winter operation, the motor operated ESW inlet valves to the Component Cooling Water (CCW) heat exchangers are throttled for temperature control. The procedure requires these valves to be full open for flow verification and therefore throttles the manual valves on the outlet of the CCW heat exchangers to maintain CCW temperature within normal operating limits.

Safety Evaluation:

This procedure is only performed in plant Modes 5, Cold Shutdown, 6, Refueling, and No Mode. Potential leakage from the hose connections following a seismic event will not degrade the ability of the ESW System and ultimate heat sink to provide cooling to essential components. Throttling the CCW flow through the CCW heat exchangers does not reduce CCW system flow. Additionally, a dedicated individual is stationed near the throttled valves to open them, if directed to do so by the Control Room. There is no increase in the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the USAR.

This procedure does not create any new or different challenges to equipment important to safety. There is no possibility that an accident or malfunction of equipment important to safety of a different type than any evaluated previously in the USAR may be created.

The ability of the CCW System to provide the required cooling water flows is not degraded. The margin of safety as defined in the basis for any Technical Specification is not reduced.

SAFETY EVALUATION: 91-0137 Revision: 0

USAR Chapter 13 Organizational Changes

Description:

This USAR change reflects the reorganization of Nuclear Services to include Licensing and Environmental Management, reflects the position of Deputy Director Plant Operations and updates a resume'.

Safety Evaluation:

Clear reporting lines and program responsibilities with required management oversight by qualified personnel has been maintained. Updating the resume' does not decrease qualifications. There is no increase in the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the USAR.

The USAR changes do not constitute a change to systems, components or methods of operation. There is no possibility that an accident or malfunction of equipment important to safety of a different type than any evaluated previously in the USAR may be created.

These changes do not reflect any change in the overall operating philosophy. The margin of safety as defined in the basis for any Technical Specification is not reduced.

SAFETY EVALUATION: 91-0138 Revision: 0

Positive Displacement Pump Miniflow Recirculation Line Valve VOTES Testing Procedure

Description:

This procedure provides the means to VOTES test the positive displacement pump miniflow recirculation line valve during plant Modes 1, Power Operation, 2, Startup, or 3, Hot Standby. The procedure also installs a pressure gauge at a drain valve on the recirculation line.

Safety Evaluation:

The gauge is installed on a safety related portion of the Chemical and Volume Control System. The gauge is connected by a metal flex hose or equivalent and the associated fittings are capable of maintaining system design pressure. There is no increase in the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the USAR.

The gauge is not rigidly coupled to the system and represents a small mass that does not adversely affect the seismic ability of the line. There is no possibility that an accident or malfunction of equipment important to safety of a different type than any evaluated previously in the USAR may be created.

The margin of safety as defined in the basis for any Technical Specification is not reduced.

SAFETY EVALUATION: 91-0139 Revision: 0

Combustible Materials Permit 91-49

Description:

Combustible Materials Permit 91-49 allows for grade level storage of combustible material equivalent to a fire load of 70,000 BTU per square foot within 50 feet of the Reactor, Auxiliary, Diesel Generator, Control and Fuel Handling Buildings. The combustible loading, as described in the USAR for the Yard Area, reflects a loading of 0 BTU per square foot for this area. This permit allows a change to the facility from its description in the USAR.

Safety Evaluation:

The consequences of a fire in the yard area has not been increased by allowing the combustible material load to be increased because fire spread into the safety related structures has not been created. The operability of the penetration seals, fire doors and dampers are not affected because the increased load does not alter their function nor compromise their fire resistance. There is no increase in the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the USAR.

There is no possibility that an accident or malfunction of equipment important to safety of a different type than any evaluated previously in the USAR may be created.

The margin of safety as defined in the basis for any Technical Specification is not reduced.

SAFETY EVALUATION: 91-0140 91-0149 Revision: 0

Immediate Boration Valve And Volume Control Tank Low Level Iso. Valve
VOTES Testing Procedures

Description:

The first procedure provides the means to VOTES test the immediate boration valve during plant Modes 3, Hot Standby through 6, Refueling. The procedure also installs pressure gauges on drain valves upstream and downstream of the immediate boration valve.

The second procedure provides the means to VOTES test the Volume Control Tank (VCT) low level isolation valves on the VCT outlet line during plant Mode 6. The procedure also installs a pressure gauge on a drain valve on the outlet line from the seal water heat exchanger which communicates to the VCT outlet line.

Safety Evaluation:

The gauges are installed on a safety related portion of the Chemical And Volume Control System (CVCS). However, the operability of the boration flow path is not adversely affected by the gauges. The gauge remains isolated except when a reading is taken to prevent the possibility of a CVCS inventory loss resulting from a tube failure. There is no increase in the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the USAR.

The gauges are not rigidly coupled to the system and represent a small mass that does not adversely affect the seismic qualification of the line. There is no possibility that an accident or malfunction of equipment important to safety of a different type than any evaluated previously in the USAR may be created.

The margin of safety as defined in the basis for any Technical Specification is not reduced.

SAFETY EVALUATION: 91-0142 Revision: 0

Centrifugal Charging Pump Miniflow Recirculation Line Valve VOTES
Testing Procedure

Description:

This procedure provides the means to VOTES test the Centrifugal Charging Pump (CCP) miniflow recirculation line valves during any plant mode. These valves are normally open during plant operation. The miniflow valves go closed after a Safety Injection Signal. This procedure momentarily closes and then opens these valves one at a time with their associated CCP running for the VOTES test. Cycling the miniflow valves does not adversely affect the CCP. The procedure also installs a pressure gauge at a drain valve on the recirculation line.

Safety Evaluation:

The gauges are installed on a safety related portion of the Chemical And Volume Control System (CVCS). However, the operability of the boration flow path is not adversely affected by the gauges. The gauge remains isolated except when a reading is taken to prevent the possibility of a CVCS inventory loss resulting from a tube failure. There is no increase in the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the USAR.

The gauges are not rigidly coupled to the system and represent a small mass that does not adversely affect the seismic qualification of the line. There is no possibility that an accident or malfunction of equipment important to safety of a different type than any evaluated previously in the USAR may be created.

The margin of safety as defined in the basis for any Technical Specification is not reduced.

SAFETY EVALUATION: 91-0143 Revision: 0

Auxiliary Building Sump Pump Discharge Isolation Valve VOTES Testing
Procedure

Description:

This procedure provides the means to VOTES test the Auxiliary Building sump pump discharge isolation valves. The procedure also installs a pressure gauge on a drain valve upstream of the isolation valves.

Safety Evaluation:

The gauge is installed on a non-safety related portion of the Floor and Equipment Drains System. Installation of this gauge does not affect any sump pump performance or system level instrumentation. There is no increase in the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the USAR

There is no possibility that an accident or malfunction of equipment important to safety of a different type than any evaluated previously in the USAR may be created.

The margin of safety as defined in the basis for any Technical Specification is not reduced.

SAFETY EVALUATION: 91-0144 Revision: 0

Diesel Generator Room Temporary Lighting

Description:

This temporary modification provides for hanging/securing of a string of lights on the west wall of each Diesel Generator (DG) Room to illuminate the area between the DG engine and wall. The string of lights is secured to safety related supports without introducing any seismic concerns.

Safety Evaluation:

The temporary string of lights does not affect the operation of the DGs. The routing of the lights is not over any rotating components which could entangle the string if it were to fall or come loose. The lights are not near any heat sensitive components or circuits which could be adversely affected by the thermal affects of the lights. There is no increase in the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the USAR.

The seismic, environmental, fire protection and class IE qualifications of the DGs are not introduced to a unique factor or influence which could create an accident or malfunction of equipment important to safety of a different type than any evaluated previously in the USAR.

The margin of safety as defined in the basis for any Technical Specification is not reduced.

SAFETY EVALUATION: 91-0146 Revision: 0

Panel Designator Correction

Description:

This modification corrects the panel designator for a Demineralized System Control Valve Position Switch (12CWM0014) on its applicable design drawing (M-0025).

Safety Evaluation:

This designator change is an as-built drawing change only and applies to a non-safety related system. There is no increase in the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the USAR.

There is no possibility that an accident or malfunction of equipment important to safety of a different type than any evaluated previously in the USAR may be created.

The margin of safety as defined in the basis for any Technical Specification is not reduced.

SAFETY EVALUATION: 91-0147 Revision: 0

Combustible Materials Permit 91-51

Description:

This Combustible Materials Permit allows for grade level storage of combustible material equivalent to a fire load of 80,000 BTU per square foot within 50 feet of the Engineered Safety Features (ESF) transformers west of the Turbine Building.

Safety Evaluation:

The ESF transformers are not safety related. Allowing 80,000 BTU per square foot to be stored within 50 feet of the ESF transformers does not seriously challenge the three hour fire barrier of the safety related structures approximately 100 feet away. Additionally, the ESF transformers are provided with fire detectors and an automatic sprinkler system. Therefore, there is no increase in the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the USAR.

The operability of the penetration seals, fire doors, and dampers of the nearby safety related structures are not affected because the increased load does not alter their function, nor compromise their fire resistance. There is no possibility that an accident or malfunction of equipment important to safety of a different type than any evaluated previously in the USAR may be created.

The margin of safety as defined in the basis for any Technical Specification is not reduced.

SAFETY EVALUATION: 91-0148 Revision: 0

125 Volt DC System Temporary Power Procedure

Description:

This temporary procedure provides the instructions for feeding an out-of-service 125 Volt (V) DC system bus with the spare charger and jumper cables during the performance of a 4.16 kV switchgear outage. This is done in order to sustain the out-of-service protection set logic. Performance of this procedure is limited to plant Modes 5, Cold Shutdown, or 6, Refueling.

Safety Evaluation:

All of the jumper cable terminations are made downstream of an operable spare class IE breaker or to and from out-of-service circuits; therefore, these terminations need not meet the qualification requirements of class IE. The routes of the jumper cables are not over or near any operable circuits or over any rotating machinery or adverse temperature environments. The cables are kept off the floor for personnel safety by securing them to unistrut or II/I pipe supports in the hallway and to the out-of-service cable trays.

Providing power to the out-of-service DC bus maintains the instrumentation and control power of the out-of-service Reactor Protection and Engineered Safety Features Systems. This maintains the out-of-service logic with no voltage degradation which, if not maintained, can challenge the out-of-service or inservice systems to actuate. There is no increase in the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the USAR.

The procedure uses a class IE 800 amp breaker between the operable IE bus and spare charger. If a short were to occur in the temporary jumpers, the class IE breaker would shed this portion of circuits from the operable IE system. Therefore, the current protection provided is equivalent to design. There is no possibility that an accident or malfunction of equipment important to safety of a different type than any evaluated previously in the USAR may be created.

The Technical Specifications are maintained because one circuit between the offsite and onsite class IE system, one emergency diesel generator and one division of electrical buses are maintained. The margin of safety as defined in the basis for any Technical Specification is not reduced.

SAFETY EVALUATION: 91-0150 Revision: 0

Essential Service Water Pump Intake Low Water Level Alarm USAR
Description Removal

Description:

This USAR change provides for removal from the USAR of the description of the Essential Service Water (ESW) pump intake low water level alarm because it is not installed and is not needed.

Safety Evaluation:

The ESW pump intake low water level alarm is not installed and is not needed because a water level below 1070 feet Mean Seal Level MSL would imply that the Ultimate Heat Sink (UHS) and the cooling lake would also be below this level. The water to the ESW system is supplied by the UHS which is a submerged pond within the cooling lake. The UHS is created within the cooling lake by a seismic Category I dam, with a crest elevation of 1070 feet. Since the UHS is a seismic Category I structure and its upper surface is located 17 feet below the normal pool elevation of 1087 feet, as stated in the USAR, the probability of losing the UHS capability is extremely low. The UHS is considered single failure proof.

The UHS level is verified at least every 24 hours to be at a level that ensures sufficient cooling capacity is available to provide normal cooldown of the facility or to mitigate the effects of accident conditions within acceptable limits. In addition, the ESW pump intake water level alarm is not needed because the Circulating Water System (CWS) would provide indications that the cooling lake level is approaching the 1070 foot elevation. The CWS pumps are designed with a minimum elevation of 1075 feet, 7 feet above the minimum for the ESW pumps. Therefore, problems with the CWS components, especially the CWS pumps could provide an indication of low cooling lake level, if this were the cause, and thus provide indication of the ESW pump intake water level.

There is no increase in the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the USAR.

There is no possibility that an accident or malfunction of equipment important to safety of a different type than any evaluated previously in the USAR may be created.

The margin of safety as defined in the basis for any Technical Specification is not reduced.

SAFETY EVALUATION: 91-0152 Revision: 0

PA Switchgear Lighting

Description:

This procedure change provides instructions for connection of temporary power to lighting transformer XQA02. This lighting is necessary for illumination of the 13.8 kV switchgear area during an outage of 13.8 kV bus PA01.

The procedure controls the size of the temporary power conductors and the terminating hardware used on the temporary conductors. Precautions are provided which cover temporary cable routing and bend radius. The 50 amp full load rating provided is sufficient to power the lighting panel.

Safety Evaluation:

The power source and lighting panel are non-class IE. The power source and temporary cable are outside of safety related structures. There is no increase in the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the USAR.

Failure of the cable has no effect on systems, structures, and components important to safety. There is no possibility that an accident or malfunction of equipment important to safety of a different type than any evaluated previously in the USAR may be created.

The margin of safety as defined in the basis for any Technical Specification is not reduced.

SAFETY EVALUATION: 91-0153 Revision: 0

Refuel Pool To Reactor Coolant Drain Tank Pump Isolation Valve
Temporary Shielding

Description:

Because of radiological concerns during inspection of the refuel pool to reactor coolant drain tank pump isolation valve, temporary lead shielding was required on Fuel Pool Cooling and Cleanup System and Liquid Radwaste System components. An evaluation revealed that the additional weight imposed on the valve and associated piping does not exceed the design requirements of these components.

Safety Evaluation:

The added weight of the shielding does not compromise any equipment important to safety, nor does the weight compromise the integrity of the valve and associated piping during a seismic event. There is no increase in the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the USAR.

There is no possibility that an accident or malfunction of equipment important to safety of a different type than any evaluated previously in the USAR may be created.

The margin of safety as defined in the basis for any Technical Specification is not reduced.

SAFETY EVALUATION: 91-0154 Revision: 0

Residual Heat Removal System Temporary Shielding

Description:

Because of radiological concerns, temporary lead shielding was required on a scaffold above Residual Heat Removal (RHR) Pump B Suction Valves EJ 8703B and EJ HV 8701B. The temporary shielding introduces a load which does not meet the design requirements for non-seismic category I systems as defined in the USAR. Therefore, while shielding is in place, valve EJ HV8701B is maintained in the OPEN position to ensure an operable flow path for the RHR system train "B" is declared inoperable. Additionally, a shielding weight limit is specified.

Safety Evaluation:

Because valve EJ HV8701B is maintained in the OPEN position when the "B" train RHR System is operable, an operable flowpath is ensured. Therefore, there is no increase in the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the USAR.

There is no possibility that an accident or malfunction of equipment important to safety of a different type than any evaluated previously in the USAR may be created.

The margin of safety as defined in the basis for any Technical Specification is not reduced.

SAFETY EVALUATION: 91-0157 91-0168 Revision: 0

Reactor Coolant System and Chemical & Volume Control System Temporary
Shielding

Description:

Because of radiological concerns, temporary lead shielding was required on Chemical And Volume Control System (CVCS) Charging Check Valves BE V8378A & B, CVCS Alternate Charging to Loop 4 Check Valves BE V8379A & B, and associated piping. An evaluation revealed that system seismic qualification and pressure boundary integrity is maintained.

Safety Evaluation:

The shielding is installed such that it remains in place during a seismic event. There is no increase in the probability or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the USAR.

There are no new or different challenges to equipment important to safety caused by installation of the shielding. There is no possibility that an accident or malfunction of equipment important to safety of a different type that any evaluated previously in the USAR may be created.

The margin of safety as defined in the basis for any Technical Specification is not reduced.

SAFETY EVALUATION: 91-0158 Revision: 0

Containment Sumps Temporary Screening

Description:

This temporary modification installs screens over the openings to the containment sumps to prevent trash from the refueling outage work from entering the sump and interfering with the sump pump operation or level indication.

Safety Evaluation:

The screens are placed at the top of the sump and only screen trash from entering the sump from the 2000' floor elevation. If the screens do prevent waste from entering the sumps because they become clogged, floor waste drainage into the sump is available from the open drain trench around the outside of the bioshield on this floor level. This trench drainage is piped directly into the sumps; therefore, the effects of placing the screens over the openings to these sumps is inconsequential. Equipment leakages from the reactor coolant pumps, containment coolers, valve stem leakoffs, floor drains, etc. are also hard piped into the sump and the screening does not screen these flows which makeup the majority of total sump waste.

The level instrumentation in the sump and above and outside the containment normal sumps are not affected by the temporary screens. Therefore, Control Room sump or containment flood level indication and alarms remain available. There is no increase in the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the USAR.

There is no possibility that an accident or malfunction of equipment important to safety of a different type than any evaluated previously in the USAR may be created.

The margin of safety as defined in the basis for any Technical Specification is not reduced.

SAFETY EVALUATION: 91-0159 Revision: 0

Transfer From Canal To Spent Fuel Pool Temporary Procedure

Description:

This temporary procedure provides instructions for pumping approximately 44,000 gallons of borated water from the transfer canal to the spent fuel pool using a temporary pump. The spent fuel pool is simultaneously pumped to the Refueling Water Storage Tank (RWST) in accordance with its applicable procedure to maintain the required spent fuel pool level. The pump is lowered to the bottom of the transfer canal with the discharge hose directed over the top of the transfer canal wall. The pumping operation is continuously monitored (approximately 4 hours) at which time the hose is removed from the spent fuel pool.

Safety Evaluation:

This configuration does not prevent systems, structures, or components important to safety from performing their design function. Attaching the discharge hose to the stanchion and allowing the hose to extend into the spent fuel pool is not considered to significantly affect the seismic response of the gate. The hose is only slightly submerged at the start of the pumping operation which precludes back siphoning of the spent fuel pool contents into the transfer canal due to pump or hose failure. There is no increase in the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the USAR.

Accidents in the spent fuel pool are limited to fuel handling accidents and cask drop accidents. No new types of potential failures have been created by this procedure. Transfer of borated water from the transfer canal to the spent fuel pool does not cause new circumstances to exist which would create an accident or malfunction of equipment important to safety of a different type than any evaluated previously in the USAR.

The required water level above the spent fuel assemblies is maintained. The margin of safety, as defined in the basis for any Technical Specification is not reduced.

SAFETY EVALUATION: 91-0162 Revision: 0

Integrated Leak Rate Test Depressurization Procedure Change

Description:

This procedure change to the Integrated Leak Rate Test (ILRT) depressurization procedure manually blocks the containment shutdown purge exhaust fan discharge damper in the open position. The damper automatically opens on fan start and automatically closes on fan stop. The damper is blocked in the open position to prevent overpressurization of the containment purge exhaust ductwork in the unlikely event that the shutdown purge fan trips.

Safety Evaluation:

This change does not degrade the isolation capability of the containment purge system by a Containment Isolation Signal or a Containment Purge Isolation Signal. There is no increase in the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the USAR.

The containment shutdown purge exhaust fan and discharge damper are non-essential components which are not important to safety. No other equipment is affected by this change. There is no possibility that an accident or malfunction of equipment important to safety of a different type than any evaluated previously in the USAR may be created.

The margin of safety as defined in the basis for any Technical Specification is not reduced.

SAFETY EVALUATION: 91-0164 Revision: 0

USAR Chapter 17.2 Changes

Description:

These USAR changes to the Quality Assurance section involve correction of typographical errors and minor wording changes for clarification.

Safety Evaluation:

These are typographical and minor wording changes only. They do not affect plant equipment, systems, or hardware. There is no increase in the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the USAR.

There is no possibility that an accident or malfunction of equipment important to safety of a different type than any evaluated previously in the USAR may be created.

The margin of safety as defined in the basis for any Technical Specification is not reduced.

SAFETY EVALUATION: 91-0165 Revision: 0

Service Water And Circulating Water Chemical Injection Modification

Description:

This modification provides for the addition of 3 injection quills to inject treatment chemicals to the Service Water and Circulating Water Systems. A pipe trench is also provided for all piping and tubing connecting chemical skids with injection points in the Circulating Water Screenhouse.

Safety Evaluation:

Addition of the injection quills and pipe trench does not increase the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the USAR.

Addition of the injection quills and pipe trench does not create an accident or malfunction of equipment important to safety of a different type than any evaluated previously in the USAR.

The margin of safety as defined in the basis for any Technical Specification is not reduced.

SAFETY EVALUATION: 91-0167 Revision: 0

Steam Generator Blowdown Automatic Valve Closure Temporary Defeat

Description:

This temporary modification defeats the automatic closure feature of the steam generator blowdown (SGB) isolation valves upon flash tank high level. The temporary modification is only performed while the plant is in Modes 5, Cold Shutdown, 6, Refueling, or No Mode.

Safety Evaluation:

In Modes 5, 6 or No Mode, the flash tank will be operating at a significantly lower temperature and pressure. Automatic closure of the blowdown isolation valves upon high SGB flash tank level is not required in these modes of operation. There is no increase in the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the USAR.

There is no possibility that an accident or malfunction of equipment important to safety of a different type than any evaluated previously in the USAR may be created.

The margin of safety as defined in the basis for any Technical Specification is not reduced.

SAFETY EVALUATION: 91-0169 Revision: 0

Emergency Diesel Generator Starting Air Test USAR Description Change

Description:

This USAR change revises reference to the Emergency Diesel Generator (EDG) starting air test performed by the vendor since the testing requirements were not correctly described in the USAR.

Safety Evaluation:

This change has no adverse affect on operation of the EDGs. There is no increase in the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the USAR.

There is no possibility that an accident or malfunction of equipment important to safety of a different type than any evaluated previously in the USAR may be created.

The testing performed by the vendor successfully demonstrated the capabilities of the air start tanks even though the testing requirements specified in the USAR were not technically specified. The margin of safety as defined in the basis for any Technical Specification is not reduced.

SAFETY EVALUATION: 91-0170 Revision: 0

Inflatable Seal Temporary Modification

Description:

This temporary modification ensures that the inflatable seals on the Spent Fuel to Transfer Canal gate have a nitrogen supply during those times when the Transfer Canal is drained for maintenance activities. Prior to drain down, the nitrogen bottle supply will be placed in service; and the service air supply isolated to preclude the loss of nitrogen to the Service Air System in the event of its failure. The two nitrogen bottles are secured at all times to the handrail on the east side of the Fuel Building (204' level). They are tightly secured to the handrail using chain or wire rope in two places to preclude falling over and causing a missile due to a damaged bottle isolation valve.

Safety Evaluation:

This modification ensures that the gate seals remain inflated during periods when the Transfer Canal is drained, even if plant air is lost. Although the seals are not safety related, this modification enhances gate integrity and reduces the chances of water loss. There is no increase in the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the USAR.

There is no possibility that an accident or malfunction of equipment important to safety of a different type than any evaluated previously in the USAR may be created.

The margin of safety as defined in the basis for any Technical Specification is not reduced.

SAFETY EVALUATION: 91-0171 Revision: 0

Ultimate Heat Sink Thermal Performance USAR Change

Description:

The Ultimate Heat Sink (UHS) thermal performance has been reanalyzed with the worst case two Essential Service Water (ESW) train operation (no single failure) using heat rejection rates based on 18 month refuel cycles for a single 1150 MWe unit. The UHS was found to be adequate for safe shutdown during Loss Of Coolant Accident and normal shutdown using UHS, under worst temperature and evaporation weather periods. This USAR change revises the appropriate sections of the USAR to be consistent with these results.

Safety Evaluation:

The UHS analysis demonstrates that the UHS has sufficient capacity to provide cooling for 30 days. There is no increase in the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the USAR.

There is no possibility that an accident or malfunction of equipment important to safety of a different type than any evaluated previously in the USAR may be created.

The Technical Specifications base the plant operating limits on minimum water level and a maximum initial lake temperature of 90 degrees to provide a 30 day cooling water supply from the ESW pumps to safety related equipment without exceeding the design basis temperature, consistent with applicable requirements. Based on the UHS reanalysis, the margin of safety as defined in the basis for any Technical Specification is not reduced.

SAFETY EVALUATION: 91-0172 91-0193 Revision: 0

Letdown Valve Compartment Temporary Shielding

Description:

Because of radiological concerns, temporary lead shielding was required on the letdown orifice isolation valves and outlet throttle valves and their associated piping. Temporary shielding was also required on a section of piping downstream of these valves. The shielding was acceptable within evaluated restrictions.

Safety Evaluation:

The lead shielding maintains structural and seismic integrity and does not compromise the piping or components located in the letdown valve compartment. There is no increase in the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the USAR.

There are no unique or different challenges to equipment important to safety nor is any unique degradation of this equipment possible by installation of the temporary shielding. Therefore, there is no possibility that an accident or malfunction of equipment important to safety of a different type than any evaluated previously in the USAR may be created.

The margin of safety as defined in the basis for any Technical Specification is not reduced.

SAFETY EVALUATION: 91-0173 Revision: 0

Essential Service Water And Circulating Water Temporary Biocide Treatment

Description:

This temporary procedure provides instructions for temporary biocide addition to the Essential Service Water (ESW) System and alternate raw water flow to the circulating water chlorine eductors while the Service Water (SW) System is out-of-service. The temporary procedure uses the Fire Protection System as the source of water to supply the biocides. Normally, water is supplied from the SW System which flows through the chlorination system then into the Circulating Water Pumphouse forebay distribution manifold.

Safety Evaluation:

The capability to fight a fire is maintained by use of this temporary procedure. There is no increase in the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the USAR.

Use of this temporary procedure does not modify, remove, or change the operation or configuration of any equipment important to safety. There is no possibility that an accident or malfunction of equipment important to safety of a different type than any evaluated previously in the USAR may be created.

The margin of safety as defined in the basis for any Technical Specification is not reduced.

SAFETY EVALUATION: 91-0174 Revision: 0

Combustible Materials Permit 91-61

Description:

This Combustible Materials Permit allows for storage of combustible material equivalent to a fire load of 80,000 BTU per square foot within 50 feet of the Essential Service Water (ESW) Pumphouse.

Safety Evaluation:

Allowing 80,000 BTU per square foot to be stored within 50 feet of the ESW Pumphouse does not seriously challenge the three hour barrier of this safety related structure. There is no increase in the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the USAR.

The operability of the penetration seals, fire doors, and dampers of the nearby safety related structures are not affected because the increased load does not alter their function nor compromise their fire resistance. There is no possibility that an accident or malfunction of equipment important to safety of a different type than any evaluated previously in the USAR may be created.

The margin of safety as defined in the basis for any Technical Specification is not reduced.

SAFETY EVALUATION: 91-0175 Revision: 0

Sump Pump Discharge Temporary Shielding

Description:

Because of radiological concerns, temporary lead shielding was required to shield personnel from hot spots on the discharge lines of Auxiliary Building Equipment Drain Sump Pumps PLF008A and B.

Safety Evaluation:

The subject components are not safety related. The system will operate properly with the shielding installed. There is no increase in the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the USAR.

There is no equipment important to safety located under the shielding; therefore, no safety related equipment would be damaged upon failure of the shielding fasteners. There is no possibility that an accident or malfunction of equipment important to safety of a different type than any evaluated previously in the USAR may be created.

The margin of safety as defined in the basis for any Technical Specification is not reduced.

SAFETY EVALUATION: 91-0176 91-0205 Revision: 0

Containment Air Coolers Flow Reduction Modification

Description:

This modification provides additional flow rate margins to assure adequate flow is available to all Essential Service Water (ESW) components by reducing required post design basis accident (DBA) cooling flow to the Containment Cooling System (this flow reduction has received Nuclear Regulatory approval). Because of this reduction, the post-DBA flow rate is very close to the normal plant operation flow rate; therefore, the required post-DBA flow rate can be achieved through normally open ESW from Containment Air Coolers Bypass Valves EF HV047 and 48.

With the ability to achieve the required flow rate through valves EF HV047 and 48, it is not necessary for ESW from Containment Air Cooler Valves EF HV049 and 50 to open on a safety injection signal (SIS). Therefore, this modification also moves the SIS previously going to valves EF HV049 and 50 over to valves EF HV047 and 48. This change provides a confirmatory open signal and precludes inadvertent closure of valves EF HV47 and 48 post-DBA. Also, as valves EF HV049 and 50 are no longer needed to open post-DBA, removing the SIS to open from these valves ensures that valves EF HV049 and 50 do not open. The status panel monitoring of valves EF HV049 and 50 is also moved to valves EF HV047 and 48.

Safety Evaluation:

This design change does not affect the safety related functions of the ESW System in any adverse way. The safety related function of the ESW System to provide cooling to the Reactor Coolant System via the Residual Heat Removal/Component Cooling Water is still maintained. These valves are containment isolation valves. This design change has no impact on their containment isolation function or remote isolation capability.

There is no increase in the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the USAR.

There is no possibility that an accident or malfunction of equipment important to safety of a different type than any evaluated previously in the USAR may be created.

By changing the SIS from valves EF HV049 and 50 to valves EF HV047 and 48, the cooling flow rates of the containment air coolers are ensured. The margin of safety as defined in the Basis for any Technical Specification is not reduced.

SAFETY EVALUATION: 91-0177 Revision: 0

Dirty Radwaste Temporary Modification

Description:

This temporary modification connects a portable high efficiency particulate air (HEPA) filter exhaust unit to the inspection opening of the Auxiliary Building dirty radwaste (DRW) sump. This is done to provide additional negative pressure at the Auxiliary Building DRW drains in order to reduce chronic contamination problems in some rooms.

Safety Evaluation:

The portable unit is securely tied to the handrail directly north of the sump using wire. The suction hose is secured to the stairway handrail using tie wraps or wire. No hoses are attached to the safety related level instruments or conduits above the sump. This configuration has no effect on systems, structures, or components important to safety or on the overall Auxiliary Building air balance. There is no increase in the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the USAR.

Installation of the HEPA unit, in the configuration described, does not introduce circumstances which could create an accident or malfunction of equipment important to safety of a different type than any evaluated previously in the USAR.

The margin of safety as defined in the basis for any Technical Specification is not reduced.

SAFETY EVALUATION: 91-0179 Revision: 0

Refueling Machine Interlocks Technical Specification Interpretation
Revision

Description:

This Technical Specification Interpretation revision clarifies the overload and load reduction setpoints for the Refueling Machine hoist.

Safety Evaluation:

This change does not increase the probability of a fuel drop. It is in accordance with the manufacturer's recommendation and ensures that in the event a fuel assembly hangs up, the hoist will be shut off to prevent fuel damage. The function of the safety interlocks and cutoffs are maintained. There is no increase in the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the USAR.

There is no possibility that an accident or malfunction of equipment important to safety of a different type than any evaluated previously in the USAR may be created.

The Technical Specifications require that core internals and reactor vessel be protected from excessive lifting force in the event they are inadvertently engaged during lifting operations. Protection of the core internals and reactor vessel are maintained by this revision. The margin of safety as defined in the basis for any Technical Specification is not reduced.

SAFETY EVALUATION: 91-C180 Revision: 0

Internal Attachment Of Sensors To Component Cooling Water Isolation And Bypass Valves

Description:

This modification allows the installation of Liberty Technology's Valve Operation Test and Evaluation System (VOTES) force sensors on the inside of Component Cooling Water Containment Isolation Valve EG HVO60 and Bypass Valve EG HV130. The VOTES sensors are normally mounted on the outside. These valves were identified as having yokes shaped such that mounting the sensor externally is not acceptable because of their narrow width and T-shape.

Safety Evaluation:

The installation of the VOTES sensor inside the yoke cannot prevent valve EG HVO60 from re-opening after inadvertent closure or prevent valve EG HV130 from opening during a design basis event. If the sensor were to be dislodged from the yoke, the safety tie wire or band will prevent the sensor from falling into the moving parts of the valve. Even if the sensor were loose, the size and shape of the stem and sensor precludes the sensor from lodging between the stem and other valve components and preventing valve travel in either direction. Therefore, the VOTES sensor installation does not increase the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the USAR.

The safety function of these valves is not impacted by the installation of the VOTES sensor. There is no possibility that an accident or malfunction of equipment important to safety of a different type than any evaluated previously in the USAR may be created.

The margin of safety as defined in the basis for any Technical Specification is not reduced.

SAFETY EVALUATION: 91-0183 Revision: 0

Fuel Transfer Gate Manual Stop Procedure Change

Description:

A new lifting sling, which is longer, has been installed on the gate between the Spent Fuel Pool and Fuel Transfer Canal. This procedure change removes the stop on the manual hoist on the Spent Fuel Pool Bridge Crane to compensate for the inadequate lift distance present with the longer sling. The procedure administratively controls the height to which the gate is lifted within the bounds of previous analysis to ensure that the load drop analysis is not exceeded.

Safety Evaluation:

The administrative controls are established to ensure the function of the hoist stop is performed. There is no increase in the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the USAR.

No equipment important to safety other than the Spent Fuel Pool Bridge Crane is affected by this procedure change. There is no possibility that an accident or malfunction of equipment important to safety of a different type than any evaluated previously in the USAR may be created.

The margin of safety as defined in the basis for any Technical Specification is not reduced.

SAFETY EVALUATION: 91-0184 Revision: 0

Steam Generator Services Cable Installation/Removal Procedure

Description:

This checklist procedure addresses the routing of eddy current test cables through a temporary sleeve placed inside Containment Penetrations P-36 or P-68. Dow Corning Silicone RTV foam is used to foam close the penetrations during core alterations as required by the Technical Specifications. The foam expands and dries following application and provides an adhesive seal and fire barrier.

Safety Evaluation:

The ability of the Containment Building and the subject penetrations to maintain their structural integrity during a seismic event has not been degraded by running cables through and foaming the penetrations. There is no increase in the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the USAR.

There are no unique or different challenges to equipment important to safety caused by installation of the sleeve. There is no possibility that an accident or malfunction of equipment important to safety of a different type than any evaluated previously in the USAR may be created.

Containment closure is maintained by the procedure as required when the plant is in Modes 5, Cold Shutdown, or 6, Refueling. The margin of safety as defined in the basis for any Technical Specification is not reduced.

SAFETY EVALUATION: 91-0188 Revision: 0

New Fuel Elevator Operating Instructions and Daily Checks Procedure
Change

Description:

This procedure change allows the new fuel elevator to be used for activities other than the lowering of new fuel into the Spent Fuel Pool. Examples of other activities would include temporary storage of a failed fuel rod rack during fuel reconstitution, temporary storage of a complete spent fuel assembly and handling of the Reactor vessel irradiated specimens or other items (less than or equal to the elevator design load). A failed fuel rod rack containing failed fuel rods or a complete spent fuel assembly could remain in the new fuel elevator for the duration of the reconstitution activities.

The previous reconstitution procedure installed the Westinghouse reconstitution elevator (inverted the spent fuel assembly for reconstitution) inside the cask loading pit and inserted the failed fuel rod rack into the new fuel elevator. This procedure change does not require the assemblies to be inverted, they may be reconstituted directly from the new fuel elevator. The failed fuel rod rack would then be suspended in the pool in accordance with reconstitution procedures.

Safety Evaluations:

The integrity of the Spent Fuel Pool is not affected by having spent fuel, irradiated specimens, or other non-fuel items in the new fuel elevator. Periodic use of the new fuel elevator for fuel reconstitution or other activities which would require insertion of up to the equivalent of one spent fuel assembly or other non-fuel items does not increase the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the USAF.

No new types of potential failures are created. The systems, structures, and components important to the safety of the Spent Fuel Pool is not affected in such a way as to create an accident or malfunction of equipment important to safety of a different type than any evaluated previously in the USAF.

The margin of safety as defined in the basis for any Technical Specification is not reduced.

SAFETY EVALUATION: 91-0189 Revision: 0

Reactor Coolant Draining Procedure Change

Description:

The purpose of this procedure change is to allow the draining of the reactor coolant pipes below the half loop for maintenance and inspection purposes.

The USAR states that the reactor coolant drain subsystems may be used to drain the reactor coolant loop to midpoint. This midpoint level is a level required when fuel is still in the reactor. This procedure is only performed after the fuel has been removed from the reactor and placed in the refueling pool. Thus, maintaining the reactor coolant piping at midloop is no longer required for the cooling period.

Safety Evaluation:

This procedure restores the system before refuel reload takes place. The temporary spool piece that is installed to allow the loop drains to the Reactor Coolant Drain Tank pumps is only installed after the system has been depressurized and fuel has been removed. Per procedure, the spool will be removed prior to pressurization or fuel loading.

Draining the water in the reactor coolant piping below midloop while the fuel is unloaded does not increase the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the USAR.

There is no possibility that an accident or malfunction of equipment important to safety of a different type than any evaluated previously in the USAR may be created.

This procedure does not affect the instruments and safeguards required for safe shutdown of the reactor. The margin of safety as defined in the basis for any Technical Specification is not reduced.

SAFETY EVALUATION: 91-0191 Revision: 0

Special Nuclear Material Safeguards And Accountability Procedure Change

Description:

This procedure change allows no more than one fuel assembly and one fuel rod storage rack inside of the cask loading pit at any one time in order to perform fuel reconstitution or other procedurally controlled activities. The fuel assembly may be new or spent. The actual placement of the assembly and rod rack is controlled by other procedures.

Safety Evaluation:

The criticality analysis of the Spent Fuel Pool racks is not affected by moving fuel assemblies/rod racks into the cask loading pit. Additionally, the probability of a previously evaluated criticality accident, including dropping of a heavy object on the fuel racks and dropping a fuel assembly into a position other than a normal fuel storage location, is no higher. There is no increase in the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the USAR.

No new types of potential failures are created. The systems, structures, and components important to the safety of the Spent Fuel Pool is not affected in such a way as to create an accident or malfunction of equipment important to safety of a different type than any evaluated previously in the USAR.

The margin of safety as defined in the basis for any Technical Specification is not reduced.

SAFETY EVALUATION: 91-0194 Revision: 0

Retrieval Of Irradiated Fuel Rod Segment Temporary Procedure

Description:

This temporary procedure removes a portion of a damaged fuel rod from a fuel assembly. The procedure positions a basket below the broken rod. An air operated vice grip is attached and the rod is withdrawn and lowered into the basket. The basket and vice grip holding the rod are raised together and moved to the lower level of the refueling pool. The rod is then transferred to a basket which can be moved through the transfer canal to the Spent Fuel Pool.

Safety Evaluation:

The temporary tools used by this procedure (basket, vice grips, rope, pole and camera) have a potential energy which is much less than previously evaluated fuel drop accidents. The possibility that the loose rod may be dropped into the reactor core does not cause a criticality accident because sufficient negative reactivity is provided by existing administrative controls to prevent criticality. This procedure does not provide administrative or mechanical controls to prevent the loose fuel rod from being raised to a level which provides less than 23 feet of water for shielding; however, Health Physics personnel monitor the radiation levels while the rod is being raised to ensure personnel exposure does not exceed levels previously evaluated in the USAR.

Performance of this procedure does not have the potential to damage either the reactor vessel internals or fuel assemblies. Previously evaluated fuel drop accidents are not affected. There is no increase in the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the USAR.

There is no possibility that an accident or malfunction of equipment important to safety of a different type than any evaluated previously in the USAR may be created.

The margin of safety as defined in the basis for any Technical Specification is not reduced.

SAFETY EVALUATION: 91-0195 Revision: 0

Miscellaneous HVAC system As-Built: Drawing Changes

Description:

This modification changes a drawing to show drain lines for the main steam enclosure building supply air unit and the Auxiliary Feedwater Pump Room Coolers. This is an as-built drawing change verified by walkdown.

Safety Evaluation:

No equipment is being modified, the change is to drawings only to more accurately reflect the equipment configuration. There is no increase in the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the USAR.

These changes do not modify any equipment in the plant. Therefore, there is no possibility that an accident or malfunction of equipment important to safety of a different type than any evaluated previously in the USAR may be created.

The margin of safety as defined in the basis for any Technical Specification is not reduced.

SAFETY EVALUATION: 91-0199 91-0217 Revision: 0

Access Control Temporary Cooling

Description:

This procedure change provides allowance to maintain certain doors open for temporary cooling of the Access Control area. The subject doors are not part of the Control Room boundary but are part of the Control Building pressurization boundary. However, during the plant status at the time cooling was needed, verification of maintaining Control Room pressurization requirements was completed with the doors open.

Safety Evaluation:

Compensatory actions are in place while the doors are open to ensure the safety functions of the Control Room Emergency Ventilation System (CREVS). There is no increase in the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the USAR.

There is no possibility that an accident or malfunction of equipment important to safety of a different type than any evaluated previously in the USAR may be created.

Operability of the CREVS is maintained. The margin of safety as defined in the basis for any Technical Specification is not reduced.

SAFETY EVALUATION: 91-0203 Revision: 0

Auxiliary Feedwater Pump Turbine Modification

Description:

This modification adds a sampling valve with an end cap to the auxiliary feedwater pump turbine lube oil system. An existing threaded drain connection is utilized for the installation of the sampling valve. Addition of the sampling valve assists maintenance personnel in obtaining quarterly lube oil samples without removing the turbine from service.

Safety Evaluation:

The addition of the sampling valve does not alter the operation or function of the safety related auxiliary feedwater pump. A stress analysis calculation was performed for the seismic requalification with the addition of the sampling valve in the lube oil piping and confirmed the seismic qualification of the turbine lube oil system is unaffected. Installation of the sample valve assembly does not create a seismic II/I concern. High energy line breaks associated with the auxiliary feedwater pump turbine include only the turbine's steam supply lines. There is no increase in the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the USAR.

No accidents are affected or created by the subject modification because all safety design basis conditions of the Auxiliary Feedwater System as described in the USAR are maintained. No new failure modes of any component, system or structure are introduced, and no accident analysis, assumptions or parameters are altered. Therefore, there is no possibility that an accident or malfunction of equipment important to safety of a different type than any evaluated previously in the USAR may be created.

Since all safety functions of the turbine driven auxiliary feedwater pump are maintained, the system requirements specified in the associated Technical Specification Bases are not affected. The margin of safety as defined in the basis for any Technical Specification is not reduced.

SAFETY EVALUATION: 91-0208 Revision: 0

Load Shed Checklist Signal Description Change

Description:

This procedure change revises the emergency diesel generator non-safety related load shed checklist to delete the signal to panel PQ01 for the Nuclear Steam Supply System computer and changes the description of the signal for PQ03 from "BOP Computer" to "NPIS Computer". The computer changes were accomplished through a plant modification.

Safety Evaluation:

The ability to load shed the non-safety related computer loads is not degraded. There is no increase in the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the USAR.

There is no possibility that an accident or malfunction of equipment important to safety of a different type than any evaluated previously in the USAR may be created.

The margin of safety as defined in the basis for any Technical Specification is not reduced.

SAFETY EVALUATION: 91-0209 91-0227 Revision: 0

Cycle 6 Reload Design

Description:

As a result of Cycle 5 nuclear fuel depletion, the fuel was shuffled and fresh fuel was added to the core for Cycle 6 operation. Additionally, as a result of fuel failures in Cycle 5, it was necessary to redesign the Cycle 6 reload pattern. The first evaluation was performed for Mode 6, Refueling, operation while the second is applicable to the remaining modes.

Safety Evaluation:

The evaluation of the Cycle 6 reload design was performed in accordance with Nuclear Regulatory Commission approved methodology. Based on this methodology, those accidents analyzed in the USAR which could be affected by this fuel reload have been reviewed and the review is documented in the Cycle 6 Reload Safety Evaluation. In all cases, it was found that the effects of this reload are accommodated within the conservatism of the applicable safety analysis.

The safety related parameters were bounded by previous analysis or the parameter was evaluated and determined that the result had no adverse effect on the accident analysis in the USAR. Therefore, the USAR safety analysis remains valid and the probability of occurrence and the consequences of a previously evaluated accident are not increased.

The Cycle 6 reload design does not increase the frequency at which equipment important to safety is actuated to protect the reactor core. The reload design also does not alter the manner in which equipment responds once required to actuate. The reload design does not degrade the performance of any safety system assumed to function in the accident analysis in order to mitigate the consequences of an accident. Therefore, the probability of occurrence or the consequences of a malfunction of equipment important to safety is not increased.

The possibility of a different type of accident or equipment malfunction is not created because there are no unique or different challenges to equipment created nor is there any unique degradation to equipment important to safety expected by operation of the Cycle 6 design.

The margin of safety as defined in the Technical Specifications is not reduced as a result of the Cycle 6 reload design. The accident analyses establish the safety limits on which the Technical Specifications are based. The reload sensitive parameters have been evaluated and are bounded by the results in the USAR.

SAFETY EVALUATION: 91-0212 Revision: 0

Cold Leg Temperature Monitoring Instrumentation Addition

Description:

This modification adds temporary non-safety related temperature monitoring instrumentation for measuring Reactor Coolant System (RCS) cold leg temperature streaming. The instrumentation is in place between the Refuel 5 and 6 outages. The instrumentation consists of 12 resistance temperature detectors (RTDs) strapped to each of two RCS cold legs (Loops 1 and 4), a datalogger located in Containment, a personal computer (PC) located in the Instrumentation and Controls Hot Shop, and associated wiring.

Safety Evaluation:

The temporary cables connecting the RTDs to the datalogger are attached to tube steel supports or structural steel at intervals such that the supports do not experience a significant increase in load, thereby maintaining the supports' structural acceptability. Additionally, the datalogger is secured to an instrument rack in Containment and is located such that it does not impact any safety related equipment in the event that the instrument fails during a seismic event.

This modification does not adversely affect the operation of any safety related equipment. There is no increase in the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the USAR.

This modification does not affect the function of any other plant equipment. There is no possibility that an accident or malfunction of equipment important to safety of a different type than any evaluated previously in the USAR may be created.

This modification does not affect the function or operating characteristics of any safety related equipment. The margin of safety as defined in the basis for any Technical Specification is not reduced.

SAFETY EVALUATION: 91-0213 Revision: 0

Tornado Damper Temporary Modification

Description:

This temporary modification allows for reassembling the mechanical linkage of the tornado damper on the unit vent without installing a spacer bushing. The linkage connection is not a precision connection but is simply a stationary pin blade arm over which the spring operated arm is connected to with a cotter pin and washer.

Safety Evaluation:

Tornado dampers are employed where isolation from the effects of extreme wind or tornado conditions is required. These dampers close with the flow produced by the differential pressure associated with tornados or high winds and are considered passive since they do not have actuation devices.

The operability of the damper to perform its function during a tornado or high wind event is not diminished by this temporary modification. There is no increase in the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the USAR.

The seismic ability of the damper is maintained without the presence of the spacer; therefore, its structural integrity is maintained. There is no possibility that an accident or malfunction of equipment important to safety of a different type than any evaluated previously in the USAR may be created.

The margin of safety as defined in the basis for any Technical Specification is not reduced.

SAFETY EVALUATION: 91-0214 Revision: 0

Dredging Ultimate Heat Sink Channel Temporary Procedure

Description:

This temporary procedure performs dredging of the Ultimate Heat Sink (UHS) channel. The dredging operation consists of overlapping passes repeated as necessary to remove sediment to within 3 inches of the original UHS bottom. Dredging is not performed within 10 feet of the concrete sediment pads or the Essential Service Water (ESW) pumphouse intake lip.

Safety Evaluation:

Use of this procedure does not degrade the ability of the UHS or the ESW System to provide required cooling water flows for 30 days following a design basis accident. There is no increase in the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the USAR.

Loss of the UHS dam is not a credible failure caused by this procedure because the size of the barge in relation to dam crest size is not enough to cause significant damage at outflow velocity. There is no possibility that an accident or malfunction of equipment important to safety of a different type than any evaluated previously in the USAR may be created.

The margin of safety as defined in the basis for any Technical Specification is not reduced.

SAFETY EVALUATION: 91-0216 Revision: 0

Refueling Machine Operating Instructions Temporary Procedure Change

Description:

The refueling machine has a number of interlocks and setpoints to control or limit motion. This temporary procedure change permits a manual stop and gripper position verification in place of the automatic stop if the automatic stop is not working.

Safety Evaluation:

This change only applies to an empty gripper being lowered to retrieve a fuel assembly and does not change the actual latching of the gripper to a fuel assembly. There is no increase in the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the USAR.

Hoist movement speed, load limits, over travel stops, or any other interlocks or setpoints are not affected. There is no possibility that an accident or malfunction of equipment important to safety of a different type than any evaluated previously in the USAR may be created.

This alternative to the automatic stop is conservative and creates no conditions adverse to nuclear safety. The margin of safety as defined in the basis for any Technical Specification is not reduced.

SAFETY EVALUATION: 91-0218 Revision: 0

Main Generator Stator Post Rewind Flush Temporary Procedure

Description:

This temporary procedure provides for the performance of a post rewind flush of the Main Generator Stator. To support this activity, use of the Fire Protection System as a source of water is provided as an option. The major components of the water supplied Fire Protection System are: two fire pumps, a jockey pump, distribution mains, fire hydrants with hose houses, standpipes and sprinklers.

Safety Evaluation:

This system is not required to shutdown or maintain the plant in a safe shutdown condition. The capability to fight a fire is maintained because the flow and pressure of water provided to the power block to mitigate the consequences of a fire is maintained. There is no increase in the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the USAR.

This procedure does not modify, remove, or change the operation or configuration of equipment important to safety. There is no possibility that an accident or malfunction of equipment important to safety of a different type than any evaluated previously in the USAR may be created.

The margin of safety as defined in the basis for any Technical Specification is not reduced.

SAFETY EVALUATION: 91-0219 Revision: 0

Fuel Storage And Handling USAR Change

Description:

This change to the Fuel Storage and Handling Section of the USAR provides information more consistent with the thermal analysis of the spent fuel pool.

Safety Evaluation:

This USAR change does not involve any change in the license design basis or the analyses results. There is no increase in the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the USAR.

The change does not involve any alterations to plant equipment or procedures that would introduce any new operational modes or accident precursors. There is no possibility that an accident or malfunction of equipment important to safety of a different type than any evaluated previously in the USAR may be created.

The margin of safety as defined in the basis for any Technical Specification is not reduced.

SAFETY EVALUATION: 91-0220 Revision: 0

Boron Dilution Event USAR Change

Description:

This is a revision of the Boron Dilution Event safety analysis parameters in order to accommodate Cycle 6 design.

Safety Evaluation:

The revisions to the USAR do not affect the frequency of previously evaluated accidents since the changes involved are only analytical revisions to the safety analysis basis as a result of Cycle 6 design. The Technical Specifications require a sufficient shutdown margin. The initial boron concentrations presented in the USAR are being revised to account for the Cycle 6 fuel design to maintain these required shutdown margin limits. The analytical revisions show that should an uncontrolled boron dilution event occur at beginning of core, the worst case margins are maintained. There is no increase in the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the USAR.

The changes being made as a result of the Cycle 6 fuel design are used only to establish bounding conditions representative for Cycle 6 and future reloads. No changes are being made to equipment important to safety. All associated structures, systems and components still meet their design specifications. There is no possibility that an accident or malfunction of equipment important to safety of a different type than any evaluated previously in the USAR may be created.

The shutdown margin is dependent on the characteristics of the fuel being considered. As a result of the revised fuel design for Cycle 6, the initial boron concentrations are revised in order to meet the minimum required shutdown margins. Since these margins are still met, the margin of safety as defined in the basis for any Technical Specification is not reduced.

SAFETY EVALUATION: 91-0224 Revision: 0

Security Lock Modification

Description:

This modification provides for the use of Best lock cylinders and padlocks on doors.

Safety Evaluation:

These items are non-safety related, non-special scope. There is no increase in the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the USAR.

The use of Best lock cylinders and padlocks with safety related and special scope (Fire Protection) doors does not create an accident or malfunction of equipment important to safety of a different type than any evaluated previously in the USAR.

The lock cylinders and padlocks are used for security purposes only and do not affect the operability of fire rated doors described in the Technical Specifications. The margin of safety as defined in the basis for any Technical Specification is not reduced.

SAFETY EVALUATION: 91-0225 Revision: 0

Turbine Generator Overspeed Protection USAR Testing Description Change

Description:

The USAR specifies checking the operation of the turbine generator overspeed protection devices under controlled overspeed conditions at startup and after each refueling. This change permits testing the overspeed protection devices during either plant shutdown or startup and require a retest following maintenance on the trip device.

Safety Evaluation:

Testing the overspeed trip upon shutdown is preferred because the turbine at this time is uniformly heated and the thermal and mechanical stresses of the controlled overspeed trip are minimized.

Testing the turbine overspeed trips increases the reliability of its function regardless of when its done. There is no increase in the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the USAR.

There is no possibility that an accident or malfunction of equipment important to safety of a different type than any evaluated previously in the USAR may be created.

The margin of safety as defined in the basis for any Technical Specification is not reduced.

SAFETY EVALUATION: 91-0226 Revision: 0

Fuel Assembly Use-As-Is

Description:

It was identified that fuel assemblies C17 and E47 had a damaged grid strap. Use-as-is of these assemblies in the Cycle 6 core was determined to be acceptable.

Safety Evaluation:

The grids are passive elements in the fuel design system and are designed to maintain a safe shutdown configuration and coolable geometry. The nonconforming grids do not impact the ability of the plant to shutdown and the potential loss of three flow channels at one grid elevation in one fuel assembly does not increase the probability of losing a core coolable geometry. There is no increase in the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the USAR.

The nonconforming grid straps do not adversely impact the performance of the fuel assembly. There is no possibility that an accident or malfunction of equipment important to safety of a different type than any evaluated previously in the USAR may be created.

The damaged assemblies do not affect rod drop times nor do they challenge the one percent failed fuel limit. The margin of safety as defined in the basis for any Technical Specification is not reduced.

SAFETY EVALUATION: 91-0228 Revision: 0

High Pressure Condenser Circulating Water Outlet Blind Flange Temporary Installation

Description:

This temporary modification installs a blind flange upstream of High Pressure Condenser Circulating Water Outlet Air Release Valve DA V178 and a half coupler and pipe plug downstream to assist in the removal of valve DA V0178 for maintenance.

Safety Evaluation:

There is no increase in the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the USAR.

The location of and the function of valve DA V0178 are such that the absence of this valve would not create an accident or malfunction of equipment important to safety of a different type than any evaluated previously in the USAR.

The margin of safety as defined in the basis for any Technical Specification is not reduced.

SAFETY EVALUATION: 91-0229 Revision: 0

Residual Heat Removal To Safety Injection Pump Downstream Isolation
Valve VOTES Test Procedure Change

Description:

This procedure change installs pressure gauges on the Residual Heat Removal (RHR) pump discharge to Safety Injection (SI) pump suction header piping to support VOTES testing of valves in this flow path. Procedure use is restricted to Mode 6, Refueling.

Safety Evaluation:

The piping and flow path the gauges are installed on are not required to be operable in Mode 6. The operability of the boration flow path is not affected because the gauges are not installed on this flow path. There is no increase in the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the USAR.

The seismic qualification of the piping that the gauges are installed on is not adversely affected by the small mass of the gauge. There is no possibility that an accident or malfunction of equipment important to safety of a different type than any evaluated previously in the USAR may be created.

The margin of safety as defined in the basis for any Technical Specification is not reduced.

SAFETY EVALUATION: 91-0230 Revision: 0

Control Room Evacuation Procedure Change

Description:

This procedure change to the Control Room Evacuation Procedure makes a change to the Fire Protection Plan as reviewed and evaluated by the NRC in the manner in which the steam generator blowdown lines are isolated. The plan isolated these lines from the Radwaste Control Room Panel by the Radwaste Control Room Operator. The change to this plan is to isolate these lines by the Reactor Operator opening a breaker at the DC Control Power Breaker Panel on the 2016 foot elevation of the Control Building. The reason for the change is that the Radwaste Operator may likely be a member of the Fire Brigade and will not remain in the Radwaste Control Room when a fire occurs in the Control Room.

Safety Evaluation:

The change accomplishes the same task and does not significantly add to the tasks assigned to the Reactor Operator or alter the route because the Reactor Operator already goes to the DC Control Power Breaker Panel to open other breakers. There is no increase in the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the USAR.

There is no possibility that an accident or malfunction of equipment important to safety of a different type than any evaluated previously in the USAR may be created.

The margin of safety as defined in the basis for any Technical Specification is not reduced.

SAFETY EVALUATION: 91-0232 Revision: 0

Diesel Exhaust System USAR Change

Description:

This USAR change provides a wording change in the USAR text to delete inaccurate information and correctly describe the means by which water accumulation is removed from the diesel exhaust system.

Safety Evaluation:

Changing the wording in the USAR text to reflect the actual design of the diesel exhaust system does not increase the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the USAR.

Changing the wording in the USAR text does not affect any equipment important to safety. There is no possibility that an accident or malfunction of equipment important to safety of a different type than any evaluated previously in the USAR may be created.

The margin of safety as defined in the basis for any Technical Specification is not reduced.

SAFETY EVALUATION: 91-0234 Revision: 0

Line Sludge Sump Level Switch Drawing Modification

Description:

This modification provides for the upgrade of applicable drawings to reflect the as-built single alternator switch for the lime sludge sump level instead of the previously indicated two switches.

Safety Evaluation:

This is an "as-built" modification to a non-safety related system to reflect the correct number of switches on the lime sludge sump level. There is no increase in the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the USAR.

There is no possibility that an accident or malfunction of equipment important to safety of a different type than any evaluated previously in the USAR may be created.

The margin of safety as defined in the basis for any Technical Specification is not reduced.

SAFETY EVALUATION: 91-0236 Revision: 0

Containment Cooler Temporary Modification

Description:

This temporary modification installs blind flanges on the "A" containment cooler where one of the twelve coil banks is being repaired. This is done to establish "A" train Essential Service Water (ESW) System flow paths for testing of the Emergency Diesel Generator (EDG). System pressure is placed on the flanges only when testing is being conducted. At all other times the "A" train containment coolers are isolated by valving under the approved controls of the Clearance Order procedure. This modification carries a Mode 4, Hot Shutdown, restraint.

Safety Evaluation:

If during testing of the EDG the flanges were to catastrophically fail and lake water sprayed and flowed into Containment, the indications and actions available to the Control Room Operators are sufficient to terminate this event without degrading the plant's safety features. The function of the Residual Heat Removal (RHR) System would not be adversely affected by this event because it would be terminated long before the submergence of the RHR suction valves on the 2008 foot level of Containment would occur. The potential to dilute the Reactor Coolant System by lake water flowing into the refueling cavity is not possible because the head is in place on the reactor. There is no increase in the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the USAR.

The seismic ability of the blanked portion of piping remains equal to that of design because the loads of the blind flanges are equal to or less than the loads of the coil. Additionally, there is no change to environmental, structural, human factors, or indication variables from previous analyses. There is no possibility that an accident or malfunction of equipment important to safety of a different type than any evaluated previously in the USAR may be created.

The margin of safety as defined in the basis for any Technical Specification is not reduced.

SAFETY EVALUATION: 91-0241 Revision: 0

Regenerative Heat Exchanger Temporary Shielding

Description:

Because of radiological concerns, temporary lead shielding was required for Regenerative Heat Exchanger EBC07 and associated piping. Installation of the shielding was found to be acceptable within evaluated restrictions. Most of the shielding was acceptable for Modes 5, Cold Shutdown, and 6, Refueling, while one portion was also acceptable for Modes 3, Hot Standby, and 4, Hot Shutdown.

Safety Evaluation:

Allowing installation of the temporary shielding for the Regenerative Heat Exchanger, excluding the shielding attached to the piping during Modes 3 and 4, ensures that system seismic qualification and pressure boundary integrity is maintained. The shielding, as evaluated for use in Modes 3 and 4, also does not reduce system functional integrity. There is no increase in the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the USAR.

There are no unique or different challenges to equipment important to safety nor is any unique degradation of this equipment possible by installation of the temporary shielding. Therefore, there is no possibility that an accident or malfunction of equipment important to safety of a different type than any evaluated previously in the USAR may be created.

The margin of safety as defined in the basis for any Technical Specification is not reduced.

SAFETY EVALUATION: 91-0243 Revision: 0

Motor Operated Valve Plant Modification Revision 3

Description:

During the Motor Operated Valve testing program as required by Generic Letter 89-10, many valves were found to be incapable of developing the thrust as required by the Torque/Thrust calculations.

Revisions 0 and 2 of this modification issued thrust values and differential pressure values for the safety related valves which are to be tested under the Generic Letter 89-10 program. The values given in these two revisions were found to be incorrect when all the criteria are applied. This revision voids revisions 0 and 2 of the modification. Revision 1 remains valid because it issued the Electric Power Research Institute (EPRI) Guideline for performing torque/thrust calculations, which is still being used.

The EPRI Guidelines were used inappropriately in the early torque/thrust calculations. The guidelines require the use of a sealing factor for valves which must be "leak-tight". Leak-tight is a term used in the guidelines to define those valves which have a leakage criteria, such as Containment isolation valves. In the earlier calculations, the sealing factor was being applied to all valves. This revision identifies those valves in the Generic Letter 89-10 testing program for which no leakage criteria exists. The closure of these valves is needed only for system line-up requirements.

Safety Evaluation:

Calculating a required thrust value for a valve using the sealing factor only assures that the valve will meet its leakage criteria under worse case conditions. It is not necessary to apply the sealing factor to assure the valve is closed. The required thrust calculated without use of the sealing factor assures that the valve is closed. In addition, the inertia of the valve after the motor is de-energized further tightens the seat.

The subject valves have no criteria to be leak-tight. Leakage through the seats of these valves in either direction is contained, severely limited, or, in the case of a piping failure, can be isolated by other means. Use of the sealing factor for these valves per the EPRI Guidelines is not necessary. None of the valves listed has a seat leak rate criteria which is used in any accident analysis. A minor leak rate does not cause the valve to malfunction or any component in the line associated with the valve to malfunction. Leakage through any of the subject valves is contained within piping systems or vessels with sufficient pressure rating such that they will not fail, or leakage is precluded by other means. There is no increase in the probability or occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the USAR.

The closure of any of the subject valves is just for system alignment. Leakage through any of the valves is contained in piping systems or vessels with sufficient pressure rating such that they will not fail. There is no possibility that an accident or malfunction of equipment important to safety of a different type than any evaluated previously in the USAR may be created.

The basis for any Technical Specification does not and needs not address seat leakage on the subject valves. The margin of safety as defined in the basis for any Technical Specification is not reduced.

SAFETY EVALUATION: 91-0244 Revision: 0

Lithium Limits USAR Change

Description:

Westinghouse/Electric Power Research Institute laboratory testing results have developed new acceptable operating regimes for reactor coolant pH control in regards to primary water stress corrosion cracking of Alloy 600. The testing took into consideration the preservation of fuel clad integrity, as well as limiting the build up of ex-core radiation fields. This USAR change incorporates the results of this study by replacing the limits placed on lithium in the USAR with the Lithium Control Program to be implemented by procedure. The procedure incorporates the lithium controls developed from the laboratory studies.

Safety Evaluation:

The integrity of the Reactor Coolant System and fuel cladding are not adversely affected by the new acceptable chemistry controls. There is no increase in the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the USAR.

There is no possibility that an accident or malfunction of equipment important to safety of a different type than any evaluated previously in the USAR may be created.

This change does not affect the assumptions, initial conditions or setpoints of any Technical Specification. The margin of safety as defined in the basis for any Technical Specification is not reduced.

SAFETY EVALUATION: 91-0247 Revision: 0

Active Valve Table USAR Change

Description:

Chemical and Volume Control System to Safety Injection Pump Isolation Valve EM HV8924 is normally open at all times during all modes of operation except for surveillance testing of the downstream isolation valves (EM HV8807A and B) and to fill and vent the Safety Injection System. This USAR change deletes valve EM HV8924 from the active valve table in the USAR.

Safety Evaluation:

The probability of a Loss Of Coolant Accident (LOCA) is not increased by deleting valve EM HV8924 from the USAR table because this change does not affect the initial conditions or assumptions considered in classifying the LOCA Event. Deleting the valve also does not affect the probability of an Emergency Core Cooling System equipment malfunction because this change does not affect equipment actuation frequencies, setpoints, integrity, qualification or accident mitigation actions. There is no increase in the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the USAR.

The change is confined to the USAR text and does not affect the integrity of any equipment important to safety. There is no possibility that an accident or malfunction of equipment important to safety of a different type than any evaluated previously in the USAR may be created.

The margin of safety as defined in the basis for any Technical Specification is not reduced.

SAFETY EVALUATION: 91-0249 Revision: 0

USAR Radiation Protection Changes

Description:

This USAR change has been initiated for the purpose of clarifying equipment usage and monitoring techniques presently being used for Radiation Protection purposes. These changes allow a better understanding of the practices now employed.

Safety Evaluation:

These USAR changes do not diminish any radiation monitoring or equipment qualifications presently being used, nor will any of the USAR accident analysis parameters used to describe a Design Basis Accident (DBA) or its consequences be impacted or altered by these changes.

These changes clarify working conditions, explain current monitoring techniques, and clarify the function for which equipment was intended. There is no increase in the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the USAR.

The operating characteristics of equipment has not been affected. There is no possibility that an accident or malfunction of equipment important to safety of a different type than any evaluated previously in the USAR may be created.

The changes made do not change any parameters discussed in the Technical Specifications. The margin of safety as defined in the basis for any Technical Specification is not reduced.

SAFETY EVALUATION: 91-0251 Revision: 0

Hydrostatic And Pneumatic Testing Procedure

Description:

The hydrostatic test of the Reactor Coolant System (RCS), which was performed because of the removal of the resistance temperature detector manifolds, requires the installation of temporary pressure gauges off of the RCS. The USAR does describe hydrostatic testing of the RCS, but does not describe or reflect the temporary installation of commercial grade pressure gauges and associated hardware.

The test package installs the temporary gauges downstream of a 3/8-inch diameter drilled restriction in the RCS piping provided for a permanent local RCS pressure gauge located in Containment. The temporary pressure gauges are installed at the block manifold for the permanent local RCS gauge and secured to its square tube steel support stanchion. Double isolation of the gauges from the RCS is provided by the root and manifold valves.

Safety Evaluation:

The failure of the commercial grade gauges or associated connection hardware would not be considered a Loss Of Coolant Accident (LOCA) event because of failure of the temporary test hardware is downstream of the 3/8-inch diameter opening. The leakage from this opening is within the normal operating capability of the charging system. A small break LOCA is defined as a rupture of the RCS pressure boundary with a total cross-sectional area less than 1 square foot in which the normally operating charging system flow is not sufficient to sustain pressurizer level and pressure. There is no increase in the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the USAR.

The seismic integrity of the stanchion used to support the local permanent indicator is not degraded by the small additional mass of the temporary gauges. Additionally, the environmental and seismic qualification of the equipment in Containment has not been introduced to a unique or different factor which could impair or degrade the function of this equipment in a way different than previously evaluated. There is no possibility that an accident or malfunction of equipment important to safety of a different type than any evaluated previously in the USAR may be created.

The margin of safety as defined in the basis for any Technical Specification is not reduced.

SAFETY EVALUATION: 91-0253 Revision: 0

Feedwater System Piping Instrumentation Addition

Description:

This modification adds temporary non-safety related instrumentation for monitoring the temperature stratification occurring inside the Feedwater System (FW) piping. The instrumentation was installed during the Refuel V outage and will be removed during the Refuel VI outage. The instrumentation consists of 23 thermocouples (T/C) and two linear motion transducers located inside Containment and five T/Cs located in Area 5 of the Auxiliary Building, mounted on FW piping to Steam Generator EBB01D. For the instrumentation inside Containment, an existing datalogger, data link and the personal computer (PC) installed for a separate modification is used to collect the required data. For the instruments located in Area 5 of the Auxiliary Building, a separate set of monitoring and data collecting equipment is located in the Turbine Building.

Safety Evaluation:

The cables connecting the instrumentation to the datalogger is supported by tube steel supports or structural steel at adequate intervals so that the installation does not affect integrity of the support and does not cause any seismic II/I concerns. The cable installation meets physical separation criteria. Installation of the datalogger and the PC connected to the Containment instrumentation is addressed in the other modification safety evaluation. The data collection devices attached to the instrumentation located in Area 5 of Auxiliary Building is located in the Turbine Building and installed such that they do not impair the performance of any other systems.

The function of this instrumentation is strictly for monitoring equipment and system performance and for collecting the data for engineering evaluation. The instrumentation installation does not affect the function or operating characteristics of any safety related plant equipment. There is no increase in the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the USAR.

There is no possibility that an accident or malfunction of equipment important to safety of a different type than any evaluated previously in the USAR may be created.

The margin of safety as defined in the basis for any Technical Specification is not reduced.

SAFETY EVALUATION: 91-0254 Revision: 0

Compressed Air System Temporary Modification

Description:

This temporary modification installs a jumper in the control panel for Instrument and Service Air Compressor CKA01A to bypass the low flow trip from the cooling water flow switch. This is done to eliminate spurious trips of the air compressor.

Safety Evaluation:

This temporary modification does not adversely affect operation of the non-safety related Compressed Air System. There is no increase in the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the USAR.

There is no effect on any equipment important to safety. There is no possibility that an accident or malfunction of equipment important to safety of a different type than any evaluated previously in the USAR may be created.

The margin of safety as defined in the basis for any Technical Specification is not reduced.

Section III

CORRECTIVE WORK REQUEST DISPOSITION: 04305-89 Revision: 3

Service Water Chemical Injection

Description:

This disposition approves the continued use (use-as-is) of a temporary modification in the Service Water (SW) System. The subject temporary modification provides the injection of a microbiocide into SW at the suction of Chlorine Booster Pumps 1CLO1PA & B.

Safety Evaluation:

The SW System is not required for the safe shutdown of the plant. During normal plant operations, the SW System also provides cooling water to the Essential Service Water (ESW) System safety related components. Therefore, the ESW System is subjected to the effect of the corrosion, scale, and deposit control inhibitors injected into the SW. However, it has been determined that the chemicals will not adversely affect the components or materials that come in contact with the chemically treated fluid in the SW and ESW Systems.

Accidents previously evaluated in the USAR do not address the injection of chemicals into the SW System, therefore there is no increase in the probability of occurrence or the consequences of an accident previously evaluated in the USAR. Also, it has been determined that the occurrence of a malfunction of equipment important to safety and its consequences are not increased.

The addition of chemicals to the SW System will not create the possibility of occurrence of an accident or malfunction of equipment important to safety of a different type than any evaluated previously in the USAR.

The margin of safety as defined in the basis for any Technical Specification is not reduced.

CORRECTIVE WORK REQUEST DISPOSITION: 04307-89 04498-89 Revision: 2

Service Water Chemical Injection

Description:

These dispositions approve the continued use (use-as-is) of temporary modifications in the Service Water (SW) System. One temporary modification provides the injection of a corrosion inhibitor into the drain line on the bottom of the SW strainers; whereas, a scale inhibitor or deposit control agent is injected into the drain lines on the discharge piping of the SW pumps.

The other temporary modification provides injection of a corrosion inhibitor and microbial control agent at a valve located in the SW supply line to Heat Exchangers A & B within the Central Chilled Water System.

Safety Evaluation:

The SW System is not required for the safe shutdown of the plant. During normal plant operations, the SW System also provides cooling water to the Essential Service Water (ESW) System safety related components. Therefore, the ESW System is subjected to the effect of the corrosion, scale, and deposit control inhibitors injected into the SW. However, it has been determined that the chemicals will not adversely affect the components or materials that come in contact with the chemically treated SW in the SW and ESW Systems.

Accidents previously evaluated in the USAR do not address the injection of chemicals into the SW System, therefore there is no increase in the probability of occurrence or the consequences of an accident previously evaluated in the USAR. Also, it has been determined that the occurrence of malfunction of equipment important to safety and its consequences are not increased.

The addition of chemicals to the SW System will not create the possibility of occurrence of an accident or malfunction of equipment important to safety of a different type than any evaluated previously in the USAR. The margin of safety as defined in the basis for any Technical Specification is not reduced.

CORRECTIVE WORK REQUEST DISPOSITIONS: Revision: 1

ASME Code Compliance Substantiation

Description:

The purpose of these dispositions was to provide a permanent use-as-is for the subject components in Revision 0 of the dispositions. The subject components are piping flanges in the Feedwater System, Auxiliary Feedwater System, Reactor Coolant System, Steam Generator Blowdown System, Essential Service Water System, Component Cooling Water System, Auxiliary Feedwater Turbine System, Miscellaneous Building Heating, Ventilation and Air Conditioning (HVAC) System, Auxiliary Building HVAC System, Containment Internal Leak Rate Test System, and Standby Diesel Engine Systems.

These dispositions incorporate standard industry position that the subject flange material is acceptable for use on a permanent basis and the documented justification for continued operation is no longer required. Revision 0 to these dispositions documented that the results of testing on the subject components were within guidelines regarded as acceptable in a Nuclear Regulatory Commission (NRC) approved generic study and analysis prepared by the Nuclear Management and Resources Council (NUMARC).

Safety Evaluation:

Although the subject components cannot be substantiated to meet all the applicable ASME Code requirements, the NRC has reviewed the nuclear industry's effort in locating, evaluating, and testing the suspect components. In NUREG-1042 the NRC approved the use of installed subject components as an acceptable alternative in accordance with 10 CFR 50.55a (a)(3)(ii). There is no increase in the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the USAR.

There is no possibility that an accident or malfunction of equipment important to safety of a different type than any evaluated previously in the USAR may be created.

The margin of safety as defined in the basis for any Technical Specification is not reduced.

NON-CONFORMANCE REPORT DISPOSITION: N-395 Revision: 0

Reactor Trip/Close Handswitch Acceptance For Use

Description:

This disposition addresses concerns resulting from a vendor's (Electroswitch) failure to comply with all of the specifications on a purchase order for a reactor trip/close handswitch. The disposition accepts the use of: A different colored faceplate; qualification to a more recent revision of the ANSI/IEEE Standard; a different United Laboratories (UL) rating; and use of an adhesively affixed label on each switch bearing instead of a corrosive resistant tab (used for displaying information).

Safety Evaluation:

The color change on the faceplate was determined to not create any human factors concerns or violate the specification under which the switch was procured. Qualification certification to the more recent revision of the ANSI/IEEE Standard was determined to meet the intent of the specification requirement to qualify in accordance with the previous revision and that it provides reasonable assurance that the switch will perform reliably in service under the postulated environmental and seismic conditions.

Electroswitch is a qualified supplier of Class IE electrical switches and relays and was required to do all of the necessary testing, therefore the rating specified by UL is acceptable.

The adhesively affixed label on each switch bearing served its purpose of identification for shipment. The labels will not remain affixed for installation, as is the case for some components, and therefore causes no concerns.

There is no increase in the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the USAR.

There is no possibility that an accident or malfunction of equipment important to safety of a different type than any evaluated previously in the USAR may be created.

The margin of safety as defined in the basis for any Technical Specification is not reduced.

REGULATORY SERVICES SAFETY EVALUATION: 91-02 Revision: 0

Manager Nuclear Safety Engineering Reporting Change

Description:

This is a safety evaluation for an organization change. It involves a change from Manager Nuclear Safety Engineering (NSE) previously reporting to Manager Regulatory Services to Manager NSE now reporting to Vice President Engineering and Technical Services.

Safety Evaluation:

The reporting relationship for the Manager NSE will not affect any USAR accident or the operation of any equipment important to safety. Therefore, there is no increase in the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the USAR.

There is no possibility that an accident or malfunction of equipment important to safety of a different type than any evaluated previously in the USAR may be created.

The reporting relationship for the Manager NSE is not mentioned in the Technical Specifications. Therefore, the margin of safety as defined in the basis for any Technical Specification is not reduced.

UNREVIEWED SAFETY QUESTION DETERMINATION: USQ-91-002 Revision: 0

CVCS Letdown Line Rupture Outside Of Containment Radiological
Consequence Determination

Description:

As described in the USAR, a break flow rate of 100 gpm was used in evaluating the radiological consequence of a Chemical Volume Control System (CVCS) letdown line rupture outside of containment. This flow rate is not consistent with the design basis of plant operation. During normal operation, the charging and letdown functions of the CVCS are employed to maintain a programmed water level in the pressurizer. This is achieved by means of a continuous feed-and-bleed process. The bleed rate of 120 gpm is chosen by selecting the proper combination of letdown orifices in the letdown flow path during normal plant operation. For a postulated pipe rupture of the CVCS letdown line at a point outside of the containment, the reactor coolant letdown flow would have passed sequentially from the cold leg and through the regenerative heat exchanger and letdown orifices. Since choked flow exists at the letdown orifices during normal operation, no increase in flow will occur due to a rupture of the letdown line downstream of the orifices. Therefore, the calculation of the radiological consequence of the postulated pipe rupture of the CVCS letdown line should be based upon a break flow rate of 120 gpm. This evaluation is performed to confirm that there is no unreviewed safety question involved with the inconsistency between the design basis value of the CVCS letdown flow and that used in evaluating the radiological consequence as described in the USAR.

Safety Evaluation:

The need to revise the USAR to bring it into agreement with the design basis of the CVCS letdown flow has no effect on mechanisms postulated in the USAR to cause design basis events, nor does it change assumptions dealing with malfunctions of equipment important to safety. Therefore, there is no increase in the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the USAR.

There are no physical modifications to the facility or changes in methods of operation. Therefore, the USAR revisions required to be made do not create the possibility of a different kind of accident or malfunction of equipment important to safety of a different type than any evaluated previously in the USAR.

The change will not result in a reduction in the margin of safety as defined in the basis for any Technical Specification since the radiological consequences remain well within the guidelines of 10CFR 100.

UNREVIEWED SAFETY QUESTION DETERMINATION: USQ-91-003 Revision: 1

Boron Dilution Accident Re-Analysis

Description:

A positive count rate (noise) was discovered in source range channel N32 while no voltage was present to the detector. The presence of noise in the baseline count rate increases the time to generate a flux doubling alarm signal during an inadvertent boron dilution transient. A concern raised was that the minimum required time for the automatic boron dilution protection system to terminate dilution may no longer be available if there is noise present in the flux doubling mitigation system and the plant was run at the Cycle 5 Boron Dilution Event (BDE) limits during operating Modes 3, Hot Standby, 4, Hot Shutdown, and 5, Cold Shutdown.

The boron dilution accidents for Modes 3, 4, and 5 were re-analyzed to address the noise concerns for Cycle 5 and Cycle 6 operation.

Safety Evaluation:

The noise present in the source range channel of the flux doubling protection system as discovered in the actual plant configuration does not adversely affect the plant operations of Cycle 5. The key safety analysis parameters for Modes 3, 4, and 5 of the BDE analysis for Cycle 6, particularly the initial boron concentration and the differential boron worth, have been revised to add an additional analysis margin to account for the noise present in the flux doubling mitigation system.

The noise present in the source range channel of the boron dilution mitigation system has no effect on mechanisms postulated in the USAR to cause design basis events. The analysis results have also confirmed that there is sufficient time available for either automatic action or operator intervention to terminate the dilution event before shutdown margin is lost. There is no increase in the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the USAR.

There are no physical modifications to the facility or changes in methods of operation. The presence of a noise in the source range channel will delay the actuation of the flux doubling alarm. However, applicable acceptance criteria are not changed. Therefore, there is no possibility that an accident or malfunction of equipment important to safety of a different type than any evaluated previously in the USAR may be created.

The margin of safety as defined in the basis for any technical Specification is not reduced since the BDE calculation results have reasonably assured that there is sufficient time available for the automatic boron dilution mitigation system to terminate the dilution event before shutdown margin is lost.

USAR CHANGE REQUEST: 90-090 Revision: 0

Generic Core Data In USAR

Description:

This USAR change involves the incorporation of generic or bounding reactor core and physics data rather than cycle specific information.

Safety Evaluation:

The probability of occurrence and the consequences of an accident or malfunction of equipment important to safety previously evaluated in the USAR does not increase as a result of the replacement of cycle specific reactor core data with generic or bounding information in the USAR. The basis for this is the continued applicability of the safety analysis design parameters. All design parameters are checked on a cycle by cycle basis to verify that the cycle design is enveloped by the existing safety analysis. This cycle by cycle verification is formally documented during the reload design process. Additionally, procedures require that a 50.59 safety evaluation be performed each cycle as part of the reload design process.

There are no unique or different challenges to equipment due to the replacement of cycle specific reactor core data with generic or bounding information in the USAR. The change is not such as to cause equipment malfunctions of any kind. There is no possibility that an accident or malfunction of equipment important to safety of a different type than any evaluated previously in the USAR may be created.

Previously reviewed and licensed safety limits are unchanged. Plant operating limits given in the Technical Specifications are also unchanged. Therefore, there is no reduction in the margin of safety as defined by the basis for any Technical Specification.

USAR CHANGE REQUEST: 90-154 Revision: 0

Dissolved Oxygen And Gaseous Oxygen Analyzer Range Change

Description:

This USAR change involves a measurement range change on the Post Accident Sampling System dissolved oxygen and gaseous oxygen analyzer. The new analyzer has a digital readout capable of displaying values up to 19.99 ppm, which is functionally equivalent to 20 ppm.

Safety Evaluation:

The Post Accident Sampling System is non-safety related and is not required for safe shutdown of the plant. There is no increase in the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the USAR.

The location and function of the analyzers did not change or affect the equipment located around it. There is no possibility that an accident or malfunction of equipment important to safety of a different type than any evaluated previously in the USAR may be created.

The margin of safety as defined in the basis for any Technical Specification is not reduced.

USAR CHANGE REQUEST: 90-167 Revision: 0

Chapter 17 Review And Update

Description:

This USAR change request involves changes resulting from an annual review and update of Chapter 17. Major changes include a rewrite of the corrective actions section to identify additional corrective action documents utilized by Wolf Creek Nuclear Operating Corporation (WCNOC) to document conditions adverse to Quality. Also included is a change of the requirement for an annual independent assessment of the effectiveness of the Operating Quality Program under the direction of the WCNOC President and Chief Executive Officer. This requirement has been replaced by a semi-annual independent assessment of the effectiveness of the Quality Assurance Evaluation Program under the direction of the Chairman of the Nuclear Safety Review Committee.

Safety Evaluation:

The changes included in this USAR change do not reduce the quality assurance previously accepted by the Nuclear Regulatory Commission. The changes clarify procedures being reviewed by Quality Assurance and clarifies program requirements for program implementation.

There is no increase in the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the USAR.

There is no possibility that an accident or malfunction of equipment important to safety of a different type than any evaluated previously in the USAR may be created.

The margin of safety as defined in the basis for any Technical Specification is not reduced.

USAR CHANGE REQUEST: 91-013 Revision: 0

Chapter 13 Organization Changes

Description:

This is a change to Chapter 13 reflecting changes to the Wolf Creek Nuclear Operating Corporation organization. These organizational changes include title changes, reporting changes, and in one case a change in personnel.

Safety Evaluation:

Clear reporting lines and program responsibilities with required management oversight by qualified personnel has been maintained. These changes do not increase the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the USAR.

These changes do not constitute a change to systems, components or methods of operation. There is no possibility that an accident or malfunction of a different type than any evaluated previously in the USAR may be created.

The margin of safety as defined in the basis for any Technical Specification is not reduced.

USAR CHANGE REQUEST: 91-021 Revision: 0

Engineered Safety Features Actuation System Update

Description:

The purpose of this USAR change is to provide proper documentation for a design change that affected a figure and text in the USAR. The actual design change was approved prior to receipt of the fuel load license but was not incorporated into design documents. This incorporation was accomplished by a general plant modification that administratively reconciled some of the pre-license documentation. It did not address this change to the USAR (FSAR).

The USAR change removes the Control Room Ventilation Isolation Signal (CRVIS) input symbol to bypass reset and bypass channels I and IV from the Engineered Safety Features Actuation System (ESFAS) logic diagram. The applicable text is also updated.

Safety Evaluation:

The activity described by this USAR change has no adverse impact on the operation of the ESFAS. There is no increase in the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the USAR.

This activity does not impede the initiation of a CRVIS. There is no possibility that an accident or malfunction of equipment important to safety of a different type than any evaluated previously in the USAR may be created.

The margin of safety as defined in the basis for any Technical Specification is not reduced.

USAR CHANGE REQUEST: 91-031 Revision: 0

Onsite Meteorological Measurement Program Change

Description:

USAR Section 2.3.3. "Onsite Meteorological Measurement Program" is confusing as to the differences between the pre-operational and the operational meteorological programs. This change request revises Section 2.3.3 to delineate those differences.

Safety Evaluation:

The changes involve only the Meteorological Program. None of the equipment in the Meteorological Program is safety related. There is no increase in the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the USAR.

The changes do not impact any data gathering or other required actions. There is no possibility that an accident or malfunction of equipment important to safety of a different type than any evaluated previously in the USAR may be created.

All required meteorological data is still being recorded and the Technical Specifications are not affected. Therefore, the margin of safety as defined in the basis for any Technical Specification is not reduced.

USAR CHANGE REQUEST: 91-038 Revision: 0

Commitment To Regulatory Guide 1.89 Revision Change

Description:

This change to the USAR involves changing the revision of Regulatory Guide 1.89 committed to in USAR Chapter 3. Regulatory Guide 1.89 provides NRC guidance on environmental qualification of equipment to the requirements of 10 CFR 50.49.

Safety Evaluation:

Changing the USAR Regulatory Guide 1.89 commitment to Revision 1 does not increase the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the USAR.

There is no possibility that an accident or malfunction of equipment important to safety of a different type than any evaluated previously in the USAR may be created.

The margin of safety as defined in the basis for any Technical Specification is not reduced.

USAR CHANGE REQUEST: 91-040 Revision: 0

Snubber Drag Force Increase

Description:

This USAR change increases the allowable snubber drag force to five pounds or two percent of the normal load rating of the snubber, whichever is greater.

Safety Evaluation:

Piping, component and equipment loads, and stresses resulting from an increase in the allowable snubber drag force have been determined to be within allowable limits. There is no increase in the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the USAR.

There is no possibility that an accident or malfunction of equipment important to safety of a different type than any evaluated previously in the USAR may be created.

The margin of safety as defined in the basis for any Technical Specification is not reduced.

USAR CHANGE REQUEST: 91-047 Revision: 0

Boron Concentration Limit Incorporation

Description:

This change involves only the correction of some USAR pages and tables that had been left out of a previous change request (90-114). This change revises the pages and tables to be consistent with the rest of the USAR and the Technical Specifications, and to incorporate the new boron concentration range that was previously evaluated and approved.

Safety Evaluation:

There is no increase in the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the USAR.

There is no possibility that an accident or malfunction of equipment important to safety of a different type than any evaluated previously in the USAR may be created.

The margin of safety as defined in the basis for any Technical Specification is not reduced.

USAR CHANGE REQUEST: 91-049 Revision: 0

Fire Protection Personnel Qualification Criteria Provision

Description:

This change to the USAR provides qualification criteria for individuals who assist in the review of ongoing revisions to the Fire Protection System. The change adds a statement which specifies that these individuals will be graduate fire protection engineers or graduate engineers (graduates in a related science) who have been certified through a course on fire protection.

Safety Evaluation:

This change provides additional guidance on the qualifications of an individual not previously stated in the USAR, it does not change any existing requirement or affect the Fire Protection System operation. The new requirement ensures that these engineers are qualified to standards appropriate for the work they are assigned. There is no increase in the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the USAR.

Since this change does not affect the operation of the Fire Protection System, there is no possibility that an accident or malfunction of equipment important to safety of a different type than any evaluated previously in the USAR may be created.

The qualification of the individual performing fire protection reviews are not discussed in the Technical Specifications. Therefore, the margin of safety as defined in the basis for any Technical Specification is not reduced.

USAR CHANGE REQUEST: 91-053 Revision: 0

Offsite Processing Of Dry Wastes

Description:

This USAR change provides for the option to use NRC/DOT approved radwaste containers, such as a sea van container, for the collection and offsite shipping of dry wastes. Controls are used for the placement of wastes into the container, performance of radiation monitoring around the container, and inspection/surveillance of the container for possible leakage or deterioration.

Safety Evaluation:

There is no increase in the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the USAR.

There is no possibility that an accident or malfunction of equipment important to safety of a different type than any evaluated previously in the USAR may be created.

The margin of safety as defined in the basis for any Technical Specification is not reduced.

USAR CHANGE REQUEST: 91-054 Revision: 0

Regulatory Guide 1.134 Revision Change

Description:

This USAR change involves committing to revision 2 of Regulatory Guide 1.134, "Medical Evaluation of Licensed personnel for Nuclear Power Plants". Revision 2 of Regulatory Guide 1.134 endorses ANSI/ANS-3.4-1983, "Medical Certification and Monitoring of Personnel Requiring Operator Licenses for Nuclear Power Plants." The revision previously referenced in the USAR endorses ANSI-N546-1976.

Safety Evaluation:

The later revision of the Regulatory Guide and ANSI Standard imposes greater medical requirements than the previous revisions. Committing to a later revision does not decrease operator skills. Therefore, there is no increase in the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the USAR.

There is no possibility that an accident or malfunction of equipment important to safety of a different type than any evaluated previously in the USAR may be created.

The Technical Specifications do not address medical qualifications of Licensed personnel. The margin of safety as defined in the basis for any Technical Specification is not reduced.

USAR CHANGE REQUEST: 91-082 Revision: 0

Control Building Heating, Ventilation, And Air Conditioning System USAR
Change

Description:

This USAR Change provides for revision of the time for completing operator action from 30 minutes to 5 hours post-accident to provide compensatory action for assumed single failures in the Control Building Heating, Ventilation, and Air Conditioning (HVAC) System. Additionally, the safety evaluation assesses the impact associated with the filtered and unfiltered flow from the Control Building to the Control Room which were found to be approximately 20 percent higher than previously analyzed when two pressurization fans were running.

Safety Evaluation:

Increasing the time for completing operator action post-accident, from 30 minutes to 5 hours, to compensate for a single failure affecting the Control Building HVAC System results in increased doses to Control Room occupants. However, the radiological consequences were re-evaluated, considering measured system flow rates (including the higher filtered and unfiltered flow from the Control Building to the Control Room), the calculated Control Building volume, and taking credit for 95 percent radioiodine removal efficiency for the Control Room, Control Building, and Emergency Exhaust HVAC System filters. The resulting radiation doses are within 10 CFR 50, Appendix A, General Design Criteria (GDC) 19 limits of 5 rem whole body (or its equivalent).

The Nuclear Regulatory Commission (NRC) Safety Evaluation Report (SER) for Wolf Creek addressed the design of the emergency ventilation and Control Room habitability system. The SER concluded that the Wolf Creek facility design is acceptable and meets the requirements of GDC 19, with respect to maintaining the Control Room in a safe and habitable condition under accident conditions. There is no increase in the probability of occurrence or the consequences of an accident previously evaluated in the USAR.

The required operator actions are based on previously analyzed Design Basis Accidents (DBA) and postulated malfunctions (or single failures) of equipment important to safety. Revising the time to take operator action does not increase the probability of occurrence or the consequences of a malfunction of equipment important to safety previously evaluated in the USAR, nor will increased unfiltered flow from the Control Building to the Control Room.

Various failures of Control Building HVAC System components have been evaluated. The Control Room dose consequences are still bounded by the postulated failure of a Control Room filtration fan. The Control Building HVAC System components relied upon to mitigate the consequences of an accident have been previously qualified and/or evaluated for consequences of Design Basis Accidents. Therefore, neither the delay in operator actions to compensate for postulated Control Building HVAC System single failures nor the increase in Control Building filtered and unfiltered air flow to the Control Room, result in the possibility of an accident or malfunction of equipment important to safety of a different type than any evaluated previously in the USAR being created.

There is no reduction in the margin of safety as defined in the basis for any Technical Specification because the system was evaluated in the SER against GDC 19 limits and the revised analysis demonstrate that operator actions

within 5 hours of the postulated DBA (to isolate affected HVAC train components or reposition dampers) result in radiological consequences which are still within these limits.