



Carolina Power & Light Company
Harris Nuclear Plant
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SERIAL: HNP-00-148
10 CFR 50.59(b)(2)

United States Nuclear Regulatory Commission
ATTENTION: Document Control Desk
Washington, DC 20555

SHEARON HARRIS NUCLEAR POWER PLANT
DOCKET NO. 50-400/LICENSE NO. NPF-63
REPORT OF CHANGES PURSUANT TO 10 CFR 50.59

Dear Sir or Madam:

In accordance with 10 CFR 50.59(b)(2), Carolina Power & Light Company hereby submits the report of "Changes, Tests and Experiments," for the Harris Nuclear Plant. The report provides a brief description of changes to the facility and a summary of the safety evaluation for each item that was implemented under 10 CFR 50.59 between November 29, 1998 and May 12, 2000 (end of RFO 9). Additionally, some changes implemented after May 12, 2000 may also be included in this report.

Questions regarding this matter may be referred to Mr. E. A. McCartney at (919) 362-2661.

Sincerely,

R. J. Field
Manager, Regulatory Affairs
Harris Nuclear Plant

MGW

Enclosure

c: Mr. J. B. Brady (NRC Senior Resident Inspector, HNP)
Mr. Rich Laufer (NRR Project Manager, HNP)
Mr. L. A. Reyes (NRC Regional Administrator, Region II)

JE47

Title: ESR 98-00043, Painting Controls for the Control Room Boundary

Description:

This ESR evaluates and provides administrative requirements needed for controlling paint fumes that may be drawn into the Control Room Emergency Filtration System. With the need for painting within the control room boundary, an evaluation to control the paint application is necessary to ensure the integrity of the charcoal beds. The ESR restricts paint application rates, painting within the control room boundary prior to running an ESF unit, and requires painting within the control room boundary to stop as soon as possible in the event the R-2A or R-2B unit starts.

Safety Summary:

The administrative painting controls established by this ESR serve to protect the Control Room Emergency Ventilation System and ensure the design basis requirements of the system can be met. These controls do not increase the probability or consequences of accidents or malfunctions of equipment previously evaluated, do not introduce a different type of accident or malfunction of equipment, and do not reduce any margin of safety. Therefore, the proposed activity does not involve an unreviewed safety question.

Title: PGO-037 Revision 6, Control of Charcoal Filter Contaminants Within Power Block

Description:

PGO-037 identifies controls for maintenance and housekeeping activities, which can generate significant organic airborne contaminants within the power block. When occurring within power block areas, such contaminants can degrade the adsorption efficiency of in-plant charcoal filters. Depending on the filter unit exposed and/or the extent of exposure, special event-driven laboratory testing of the charcoal retention efficiency may be required. Revision 6 to PGO-037 deletes an exclusion for touch up painting and use of light solvents, clarifies "operable" requirements to be consistent with "Responsibilities" section, adds 12 hour requirement for control room emergency filtration to be consistent with requirements of ESR-98-00043 and other clarifications.

Safety Summary:

The administrative controls established by this procedure revision are being implemented to ensure that the Control Room Emergency Filtration System will meet its design requirements. Those design requirements include filtering the outside air intake in the case of a design basis accident to ensure the habitability of the control room. These requirements are being maintained by this procedure revision and therefore this activity does not increase the probability or consequences of accidents or malfunctions of equipment previously evaluated, does not introduce a different type of accident or malfunction of equipment, and does not reduce any margin of safety. Therefore, the change does not involve an unreviewed safety question.

Title: EPT-228, Rev. 0, ESW Screen Wash Piping Flush Procedure

Description:

This activity provides a procedure to flush piping in the Emergency Service Water (ESW) Screen Wash System.

Safety Summary:

The EPT is for flushing the ESW Screen Wash system only. ESW Screen Wash is not an accident initiating system. The probability of occurrence of an accident previously evaluated in the FSAR is not increased because systems associated with ESW will not be operated outside design limits during the flushing process. Steps in the procedure will be sequenced to minimize the potential for system vibration or water hammer. The system line-up will prevent reverse flow through the ESW Screen Wash pump. In summary, these changes do not increase the probability or consequences of accidents or malfunctions of equipment previously evaluated, do not introduce a different type of accident or malfunction of equipment, and do not reduce any margin of safety. Therefore, the proposed activity does not involve an unreviewed safety question.

Title: CSP-NGGC-2504, Nuclear Fuels Management & Safety Analysis Computer System Configuration and Change Control

Description:

The purpose of procedure CSP-NGGC-2504 is to control requesting, approval, documentation, installation, testing, and verification of computer changes made to CP&L's Nuclear Fuels Management and Safety Analysis Section (NFM&SA) computer systems. It is also a purpose of this procedure to implement controls to provide barriers to protect plant data from inadvertent changes that might result from NFM&SA test environment activities.

Safety Summary:

The SAR does not address the systems that come under the scope of CSP-NGGC-2504. The computer systems used in the NFM&SA Section do not actuate any reactor safety response and do not provide any input to the reactor protection system. Ported on the NFM&SA systems are computer codes that provide predictions of nuclear parameters such as peaking factors, power distributions, boron requirements and reactivity coefficients. The control of these computer codes is regulated by other procedures. There is no impact on the predictive ability of these computer codes from the introduction of CSP-NGGC-2504 because there are no changes to the associated (nuclear physics and computational) methodologies. This new procedure will improve the recovery time of these codes following unavoidable systems failure such as power outages and disk crashes and will provide stronger barriers against preventable failures due to weak configuration. Introduction of CSP-NGGC-2504 does not increase the probability or consequences of accidents or malfunctions of equipment previously evaluated, does not introduce a different type of accident or malfunction of equipment, and does not reduce any margin of safety. Therefore, the change does not involve an unreviewed safety question.

Title: ESR 97-00429, Sealing of the Containment Recirculation Sump Floor

Description:

The objective of this ESR is to eliminate further infiltration of water from the Containment Sumps into the seismic gap between the Containment Liner and the base slab. The actions to accomplish this objective and the implementing documents include chipping and grouting the sump wall/floor interface near the pipe penetrations and modification of the sump cover.

Safety Summary:

The modification of the sump cover and the sealing of the sump floor will not create a pathway for particles greater than 1/8" of an inch to enter the sump. This change will not impact the sequence of events or the release paths of the design basis event. Therefore, this change does not increase the probability or consequences of analyzed accidents, nor introduce a different type of accident or equipment malfunction. The proposed change does not decrease the margin of safety as described in the Technical Specifications. Therefore, no unreviewed safety question exists.

Title: ESR 97-00638, Temporary Fuel Service Elevator**Description:**

The proposed activity evaluated is ESR 97-00638 for the use of a temporary fuel service elevator to support fuel inspections and fuel reconstitution. The elevator will be manufactured and installed by Siemens Power Corporation (SPC). The elevator will be located on the concrete island between the units 1 & 4 transfer canal and the new fuel pool (fuel pool 'A'). the installation will be performed in accordance with vendor procedures, site specific procedures and this ESR. The elevator will be seismically restrained to prevent the platform from falling in the transfer canal or fuel pool 'A'. the elevator is designed with several safety features. The fuel service elevator may be used for fuel reconstitution, fuel maintenance and fuel inspections. The fuel service elevator shall only be used when all other fuel movement in the FHB is suspended until the fuel assembly is removed from the elevator. Once the activities associated with the elevator are complete, the elevator will be removed and returned to SPC.

Safety Summary:

The proposed activity, placement of the SPC fuel service elevator in the units 1 & 4 transfer canal, does not require physical modification to the plant and does not have potential to interact with spent fuel racks/spent fuel assemblies. This activity does not alter the ability to maintain water over or cool the fuel pools. When the elevator is in use, only one fuel assembly is to be moved at any one time and placed in the elevator. An accident involving more than one fuel assembly has previously been analyzed and bounds the potential of damaging a fuel assembly involving the elevator. Mechanical up-stops are provided to protect against simultaneous catastrophic failure of both the two level electric up stop system and operator actions to stop up movement of the carriage/fuel assembly. Any failure of the elevator in the transfer canal will not affect the performance/operation of any systems, structures, or components important to safety. In summary, these changes do not increase the probability or consequences of accidents or malfunctions of equipment previously evaluated, do not introduce a different type of accident or malfunction of equipment, and do not reduce any margin of safety. Therefore, the proposed activity does not involve an unreviewed safety question.

Title: GP-009 Revision 16, Refueling Cavity Fill, Refueling and Drain of the Refueling Cavity Modes 5-6-5

Description:

This change allows using one train of the Residual Heat Removal System (RHRS) to fill and drain the refueling cavity, when the plant is in refueling mode, and the other train being used to provide decay heat removal.

Safety Summary:

The SAR lists the RHRS as a dual function system. The use of the RHRS to provide shutdown cooling and to manipulate refueling cavity level has been previously analyzed. This change does not impact the ability of the RHRS to perform its required safety function. Therefore, this change does not increase the probability or consequences of analyzed accidents, nor introduce a different type of accident or equipment malfunction. The proposed change does not decrease the margin of safety as described in the Technical Specifications. Therefore, no unreviewed safety question exists.

Title: PLP-651, Rev. 2, Steam Generator Program**Description:**

This activity revises PLP-651 to incorporate new commitments, new industry experience, and new guidance from EPRI. The commitments are associated with NRC GL 97-05 and 97-06. These commitments are associated with the conduct of eddy current testing and the performance of secondary side inspections. Several Operating Experience reports have been incorporated into this procedure revision. A significant part of this revision is the result of changes to the EPRI SG ISI Guidelines document (TR10659-V1R5).

Safety Summary:

All of the changes described above are enhancements to the procedure and do not constitute any change in methodology or step by step instructions. There are no additional maintenance activities such as removal of manways added by this procedure change. All Technical Specifications and requirements with respect to the Steam Generator inspection and repair program remain unchanged by this program. This program aids in ensuring that the Technical Specification and Operating License requirements are met.

The SAR evaluates two accident occurrences related to this activity. Steam Generator Tube Rupture and Loss of Coolant Accidents. The probability of SGTR events is not increased by the changes associated with this PLP-651 revision. In summary, these changes do not increase the probability or consequences of accidents or malfunctions of equipment previously evaluated, do not introduce a different type of accident or malfunction of equipment, and do not reduce any margin of safety. Therefore, the proposed activity does not involve an unreviewed safety question.

Title: The Pump and Valve Operability Assurance Program**Description:**

This change revises FSAR sections 3.9.3.2.1, 3.9.B, 3.9.C, and Tables 3.9.3-12, -13, -14 and -15. The changes are being made to reflect that the Pump and Valve Operability Assurance Program (PVORT) included in the FSAR is a historical description of the program that was compiled for initial operating license review. The PVORT document and associated tables in Section 3.9.3 will not be updated. The HNP IST Program Plan provides the basis for current and future operability assessments of safety related components. Pump and valve operability information is available in various plant and vendor documents. The site and corporate procedures control the design change process, ensuring compliance with requirements for future design changes.

Safety Summary:

This FSAR change is administrative in nature. No physical changes are being made to plant equipment. There is no change to design, material or construction standards. The accident mitigation ability of plant systems is not changed. There are no direct or indirect equipment changes, setpoint changes, etc. associated with this FSAR change. The changes to FSAR Section 3.9.3. do not compromise the ability to comply with 10 CFR 50 Appendix A, General Design Criteria, and the quality assurance requirements of 10 CFR 50 Appendix B. This FSAR change will not increase the probability or consequences of accidents or malfunctions of equipment previously evaluated, will not introduce a different type of accident or malfunction of equipment, and will not reduce any margin of safety. Therefore, the change does not involve an unreviewed safety question.

Title: ESR 98-00031, Revision 5, Steam Generator Blowdown System Water Hammer Prevention

Description:

This change revises FSAR Section 10.4.8.2, "System Description and Operation" for the Steam Generator Blowdown System (SGBS). The revised description discusses a 1-inch bypass line installed to provide a slower method of filling voids in the piping to prevent water hammer events from occurring. The description includes how this bypass line is used, and the order in which the valves are manipulated.

Safety Summary:

The change to FSAR Section 10.4.8.2 describes the operation of the new 1-inch bypass line which will prevent water hammer events in the SGBS. Other associated FSAR changes were made to Tables 6.2.4-1 and 16.3-5 and Figure 10.1.0-6 via earlier revisions of ESR 98-00031 and Safety Evaluation 98-0219. The installation of a 1-inch bypass line around each of the SGBS outside containment isolation valves (CIVs) revises the plant configuration as defined in the FSAR. The bypass line will operate to avoid water hammers in the piping downstream of the outside CIVs. The SGBS is not an accident initiating system. The CIVs perform an accident mitigating function. The addition of the bypass line does not alter the SGBS containment isolation function or capability during normal operations or accident conditions. An active failure of the existing outside automatic CIVs remain the most limiting single failure. Addition of local pressure instrumentation and computer points are for indication only. The manual CIVs will not introduce or change any existing automatic isolation or closing response functions for the outside CIVs. All piping, tubing and associated components have been evaluated as environmentally and seismically qualified and supported. Computer point wiring installation maintains safety/non-safety isolation and separation criteria. Failure of the SGBS CIV bypass line involves an accident identical to that analyzed for the existing SGBS outside CIVs. This change will not increase the probability or consequences of accidents or malfunctions of equipment previously evaluated, will not introduce a different type of accident or malfunction of equipment, and will not reduce any margin of safety. Therefore, the change does not involve an unreviewed safety question.

Title: ESR 95-00235, Permanent Dechlorination Equipment

Description:

ESR 95-00235 modifies the cooling tower blowdown dechlorination equipment by replacing the existing ammonium bisulfite addition equipment located near the cooling tower blowdown weir. The biofouling control and neutralization systems are non-nuclear safety systems. Their function is to enhance that efficiency by aiding condenser performance and to ensure that the plant complies with environmental limitations imposed by state and federal regulations.

Safety Summary:

The proposed activity only affects non-safety, Q-Class Equipment. There is no effect on the function or operation of any safety-related equipment. This change does not increase the probability or consequences of accidents or malfunctions of equipment previously evaluated, does not introduce a different type of accident or malfunction of equipment, and does not reduce any margin of safety. Therefore, the change does not involve an unreviewed safety question.

Title: ESR 97-00233, Main Feedwater Isolation Valves Design Change**Description:**

The purpose of ESR 97-00233 is to perform modifications to the Main Feedwater Isolation Valves (MFIVs) 1FW-159, 1FW-217, and 1FW-277. The existing electro-hydraulic actuators will be replaced with pneumatic actuators which will be supplied with an assured nitrogen supply for operation. The nitrogen will be supplied from the bulk nitrogen system to individual valve accumulators. Additionally, the valve internals will be modified from their existing flex wedge gate design to a parallel slide gate design.

Safety Summary:

Improving the MFIV operation and reliability helps to ensure that the MFIVs will respond as analyzed in the accidents discussed in the FSAR. The modifications will not result in increased on-site or off-site dose consequences. Appropriate safety/non-safety separation is maintained in addition to physical and electrical independence of the three valve actuators. The new controls are completely independent such that in the event of a single failure, the actuation logic or solenoid will not prevent the control panel/actuator assembly from closing the valve, as the MFIV will retain the capability to be shut from independent trains of isolation signals. The new MFIV actuators are designed to fail in their shut position upon loss of power. Low pressure alarms are provided to alert operations of low pressure in the tanks. The alarms are set such that, upon receipt of a low pressure alarm, there is sufficient pressure in the accumulator to stroke the valve to the shut position. The design requirements of ASME Class 2 are maintained. These changes do not increase the probability or consequences of accidents or malfunctions of equipment previously evaluated, do not introduce a different type of accident or malfunction of equipment, and do not reduce any margin of safety. Therefore, the changes do not involve an unreviewed safety question.

Title: PLP-106, Revision 20, "Technical Specification Equipment List Program and Core Operating Limits Report" – Procedure Revision

Description:

This change is administrative. The changes in this revision of PLP-106 consist of (1) changes to the Core Operating Limits Report (COLR) per ESR 97-00784, (2) change to the response times for Over Temperature Delta Temperature and Over Power Delta Temperature trips, (3) clarification of the impact of an inoperable snubber when the snubber is adjacent to a containment isolation valve. The USQD for the COLR revision is contained in SE 98-0227, Rev 1 and the USQD for the RTD response time changes are contained in SE 98-253. USQD SE 98-268 is for the clarification of the impact of an inoperable snubber when the snubber is adjacent to a containment isolation valve.

Safety Summary:

The proposed changes to PLP-106 are administrative in nature and will not modify plant systems nor modify the manner in which they are operated. Clarification is being made with regards to the impact of an inoperable snubber when the snubber is adjacent to a containment isolation valve. Since the systems are not being modified and the operation of the systems is not being modified, then the probability of occurrence of an accident is not being increased. System requirements and parameters are not being modified as a result of this change. Therefore the consequences of an accident previously evaluated in the FSAR are not increased. Since these changes are only administrative, and there is no impact on equipment important to safety, there is no increase in the probability of the occurrence of a malfunction or the consequences of a malfunction to this equipment. No new accidents are created as a result of these administrative changes and the NRC acceptance limits as defined in the SAR are not affected by this change. There is no reduction in the margin of safety as defined in the basis for any Technical Specification. No USQ results due to these administrative changes to PLP-106.

Title: BNP Spent Fuel Handling Operations**Description:**

The proposed activity evaluated is Revision 6 to FHP-030, "BNP Spent Fuel Handling Operations". This revision incorporates procedural steps for dispositioning BWR fuel assemblies stored at HNP which will not fully seat into a BWR spent fuel storage rack due to interference between the storage rack and the BWR assembly channel fastener. BWR assemblies which do not properly seat are not in their preferred long-term storage configuration and require some type of repair. Revision 6 provides steps for dealing with damaged channel fasteners. The two options that are covered are: (1) removal of the damaged channel fastener and (2) to continue the deformation such that the channel fastener or spring is bent to a horizontal or greater position. Both of these options remove the interference between the rack and the channel fastener and would allow the fuel assembly to properly seat.

Safety Summary:

The proposed activity, BWR fuel assembly channel fastener removal and modification as described in Revision 6 to FHP-030, would be performed with the BWR assembly suspended from the BWR fuel handling tool and with the assembly partially inserted into a BWR storage rack cell. Positive control is maintained over the assembly at all times. The weight of a BWR assembly cannot be taken off the handling tool by the channel fastener repair/removal activity since the fastener will bend at a force lower than would be required to lift the assembly. The worst possible scenario involving the drop of a BWR fuel assembly has previously been evaluated and shown to be bounded by the drop of an HNP fuel assembly. The removal or modification of BWR channel fasteners does not change any fuel assembly characteristics which could have an effect on the previously evaluated accident. Repair tool or fuel handling tool failure would not affect the performance or operation of any systems, structures or components important to safety. This activity does not require any changes to plant systems, processes or procedures which would result in a difference in the way equipment important to safety is operated or maintained. In summary, these changes do not increase the probability or consequences of accidents or malfunctions of equipment previously evaluated, do not introduce a different type of accident or malfunction of equipment, and do not reduce any margin of safety. Therefore, the proposed activity does not involve an unreviewed safety question.

Title: ESR 99-00025, Isolate Feedwater Heater Sight Glasses

Description:

This change revises FSAR Figure 10.1.0-5. ESR 99-00025 isolates the Jerguson sight glasses on the Main Steam Reheat Drain Tank (MSRDT), Main Steam Drain Tank (MSDT), Nos. 4 and 5 heaters. The root valves on these gauges will be kept normally closed. This will prevent a potentially hazardous failure of a sight glass from occurring during normal operation, and it will enable the heater sight glasses to remain available for use as necessary, which would not be possible if the gauges were abandoned in place (i.e., plugged).

Safety Summary:

The ESR does not remove or physically alter the sight glasses; it merely isolates the root valves. The sight glasses remain available for use as necessary. This change in normal root valve position results in a change to a plant drawing which is presented in the FSAR. The sight glasses affected by this activity are not safety-related, and play no part in accident initiation or mitigation. The tanks and heaters associated with the sight glasses are part of the Condensate and Feedwater system, which is defined as an accident initiating system. The availability of the sight glasses does not, however, impact design basis accident initiation. No new radiological release paths are created by this activity, and no accident analysis assumptions are affected by this activity. The sight glasses do not interface with any safety-related equipment. No new failure modes or equipment interactions are created by isolating the sight glasses. This FSAR change will not increase the probability or consequences of accidents or malfunctions of equipment previously evaluated, will not introduce a different type of accident or malfunction of equipment, and will not reduce any margin of safety. Therefore, the change does not involve an unreviewed safety question.

Title: ESR 9600044, Personnel Air Lock (PAL) Locking Pin Failures**Description:**

Over the course of plant operation, the PAL has experienced numerous failures of the air lock doors caused by bent locking pins and damaged hydraulic cylinders. As a result, the activity evaluated is the elimination of the locking pins on the hydraulic cylinders on both doors of the PAL. The hydraulic cylinders will be left in place. Both the cylinders and the pins are part of the hydraulic system which opens and closes the doors. The hydraulic system is non-safety related since it is not required for maintaining containment integrity.

Safety Summary:

The hydraulic system, including the hydraulic cylinder and locking pin, is classified as non-safety related. It is not required to keep the PAL doors in a closed position or to maintain a leak tight seal. A review of the PAL's seismic qualification report shows that the locking pin was not considered in the seismic qualification of the PAL and is, therefore, not required to ensure seismic qualification of the component. A failure of the hydraulic system (e.g., as a result of a seismic event or other design basis accident) would not cause the doors to open or to lose leak-tightness. The PAL would still be able to provide its safety related function of maintaining containment integrity. This change does not increase the probability or consequences of accidents or malfunctions of equipment previously evaluated, does not introduce a different type of accident or malfunction of equipment, and does not reduce any margin of safety. Therefore, the change does not involve an unreviewed safety question.

Title: Revision to Emergency Action Levels**Description:**

The proposed activity evaluated is Revision 99-01 to HNP Emergency Action Levels (EALs). This EAL revision includes: (1) replacement of "boron dilution" related Alert and Site Area Emergency event classifications with more appropriate Unusual Event Classification for an "Inadvertent Criticality" event of which boron dilution would be a contributing factor, (2) application of a numbering scheme to the EALs as an additional aid in communicating events, and (3) clarification of terminology and other administrative changes.

Safety Summary:

The proposed EAL revision, including the changes associated with classification of events, does not alter any actions or decisions associated with plant operational response. These changes serve to improve communication and minimize the potential for inconsistent application of classification criteria. The elimination of Alert and Site Area Emergency classification of boron dilution events is consistent with NRC Generic Letter 85-05 and FSAR Section 4.3. The impact of not declaring these events, and the resultant staffing of the Emergency Response Facilities, remains consistent with the design assumptions of the Harris Plant and does not result in an increased burden to the plant operational staff. Equipment important to, or associated with, safety is not utilized or impacted by event classification related activities. The use of ERFIS, plant indications and communications equipment is unchanged as a result of this revision. In summary, these changes do not increase the probability or consequences of accidents or malfunctions of equipment previously evaluated, do not introduce a different type of accident or malfunction of equipment, and do not reduce any margin of safety. Therefore, the proposed activity does not involve an unreviewed safety question.

Title: Revision to PEP-230, "Control Room Operations"

Description:

The proposed activity evaluated is Revision 4 to PEP-230, "Control Room Operations". This revision includes: (1) form numbering was revised to match the attachment numbers, (2) removed public address guidelines which are now covered in another procedure, (3) removed instructions for the activation of the emergency response facilities and placed in another procedure, and (4) updated procedural references in the checklists.

Safety Summary:

The procedure proposed for revision describes the methods the Control Room staff would use to respond in an emergency. Information being removed from this procedure is covered in another procedure. This procedure continues to support the accidents evaluated in the SAR. The effectiveness of implementing the Emergency Plan has not been reduced. The overall effect of this procedure is felt to be an enhancement to communications and procedure usage. This procedure does not describe safety related equipment or accident scenarios. No new equipment is utilized as a result of this procedure revision. In summary, these changes do not increase the probability or consequences of accidents or malfunctions of equipment previously evaluated, do not introduce a different type of accident or malfunction of equipment, and do not reduce any margin of safety. Therefore, the proposed activity does not involve an unreviewed safety question.

Title: Revision to PEP-310, "Notifications and Communications"**Description:**

The proposed activity evaluated is Revision 7 to PEP-310, "Notifications and Communications". This revision includes: (1) taking procedural content steps and making forms (attachments) to simplify the notification process, (2) moving the inadvertent actuation of a Harris Emergency Warning system to another procedure which combines the siren and tone alert radio program elements, (3) adding public address announcements that were removed from another procedure, (4) changing the assembly method for CP&L (non-Emergency Response Organization) and contractors from assembling outside the protected area to dismissal from the site, and (5) various other administrative changes.

Safety Summary:

The procedure proposed for revision describes the methods with which the Control Room staff would communicate off-site and on-site in an emergency. The purpose of this revision is to simplify the notification process and make various other administrative changes. The overall effect of this procedure revision is felt to be an enhancement to communications and procedure usage. The notification process for the accidents previously described in the SAR remain unchanged. The effectiveness of implementing the Emergency Plan has not been reduced. This procedure does not describe accident scenarios, safety related equipment, or the use of equipment important to safety. No new equipment is utilized as a result of this procedure revision. In summary, these changes do not increase the probability or consequences of accidents or malfunctions of equipment previously evaluated, do not introduce a different type of accident or malfunction of equipment, and do not reduce any margin of safety. Therefore, the proposed activity does not involve an unreviewed safety question.

Title: EPM-400 Revision 1, Public Notification and Alerting System**Description:**

This change to EPM-400 improves the methods to be able to effectively track siren power loss and restoration. Improvements to EPM-400 include the contacts for sirens that are not powered by CP&L. Also, forwarding of siren e-mail messages to the Emergency preparedness advisors and the Site Emergency Coordinator – Technical Support Center positions so that they may provide assistance to the main control room. Information regarding inadvertent actuation of the public emergency warning system was relocated from PEP-310. This revision added record retention requirements for the annual TARR report.

Safety Summary:

This revision to EPM-400 continues to support the accidents evaluated in the SAR. The effectiveness of implementing the emergency plan has not been reduced. The overall effect of this revision is an enhancement to siren procedure usage.. No changes were made to siren function or initiation. Therefore, this change does not increase the probability or consequences of analyzed accidents, nor introduce a different type of accident or equipment malfunction. The proposed change does not decrease the margin of safety as described in the Technical Specifications. Therefore, no unreviewed safety question exists.

Title: PLP-201 Revision 34, Emergency Plan**Description:**

The proposed activity evaluated is Revision 34 to PLP-201, "Emergency Plan". This revision includes: (1) adding allowance for NRC notifications to be made using other notification messages and not just the NRC Event Notifications worksheet; (2) changing or adding the correct support organizations for fire, weather, and other support activities; (3) removing the requirement for Emergency Operations Facility and Technical Support Center personnel to have radiation worker training since training for dosimetry has been added to an Emergency Preparedness training module; (4) changing the responsibility for identification of missing personnel to Security rather than reporting missing persons to Security; and (5) various other administrative changes.

Safety Summary:

The activity evaluated is Revision 34 to PLP-201, "Emergency Plan". The emergency notification process, contracts and support, training, assembly and accountability for the accidents are not addressed in the SAR. This procedure does not describe accident scenarios, safety related equipment, or the use of equipment important to safety. No new equipment is utilized as a result of this procedure update and there is no impact on safety related equipment. The effectiveness of implementing the Emergency Plan has not been reduced. In summary, these changes do not increase the probability or consequences of accidents or malfunctions of equipment previously evaluated, do not introduce a different type of accident or malfunction of equipment, and do not reduce any margin of safety. Therefore, the proposed activity does not involve an unreviewed safety question.

Title: ESR 96-00338, Corrections to Flow Diagrams

Description:

ESR 96-00338 updates various design drawings and FSAR Figure 9.2.8-1 to add the Safety Injection symbol "S" to valves indicated below in order to indicate a Safety Injection signal is received. This ESR is a document change only ESR and will not result in physical or functional changes to the plant. This symbol was erroneously omitted for Essential Services Chilled Water System "A" Isolation Valves 3CH-B3SA-1 (1CH-115), 3CH-B4SB-1 (1CH-116), 3CX-B4SA-1 (1CH-126), 3CX-B3SB-1 (1CH-125), 3CH-B2SA-1 (1CH-149), 3CH-B1SB-1 (1CH-148), 3CX-B2SA-1 (1CH-197), and 3CX-B1SB-1 (1CH-196).

Safety Summary:

This ESR is classified as a "Document Change Only" ESR and does not result in physical, functional, design, or material changes to the plant. The eight Essential Services Chilled Water System "A" isolation valves are currently identified in FSAR Table 7.3.1-5, which identifies ESF actuated equipment which receive a Safety Injection signal to initiate operation. These valves are correctly identified in appropriate plant procedures and no changes to their function or design will occur as a result of this ESR. This change simply updates design drawings and the FSAR to be consistent with the current design and other sections of the FSAR. Therefore, this change does not increase the probability or consequences of analyzed accidents, nor introduce a different type of accident or equipment malfunction. The proposed change does not decrease the margin of safety as described in the Technical Specifications. Therefore, no unreviewed safety question exists.

Title: ESR 98-00411, Pressurizer Heater Backup Control Switches A&B

Description:

ESR 98-00411 replaces the backup A&B pressurizer heater control switches on the ACP (CS-152.2 & CS-153.2) with "maintained contact" switches and changes the position that the switches are in during times when the ACP is unmanned. This design change makes the backup heater control switch action the on the ACP as that which exists on the MCB, eliminates concerns regarding unwanted backup group A&B heater energization when transferring to the ACP, and improves the ability to de-energize heaters from the ACP when taking the plant to cold shutdown from the ACP. The components under review are safety related Q-class A and backup group B heaters are required to support remote shutdown from the ACP in the event of a control room evacuation.

Safety Summary:

The change to the switching action of the backup pressurizer heater control switches on the ACP from "spring return" to "maintained contact" and the change in switch position during times when the ACP is unmanned does not impact the site remote shutdown strategy or safe shutdown analysis. This change makes the backup heater control switch action at the ACP the same as the corresponding switch action on the MCB. This change does not increase the probability or consequences of accidents or malfunctions of equipment previously evaluated, does not introduce a different type of accident or malfunction of equipment, and does not reduce any margin of safety. Therefore, the change does not involve an unreviewed safety question.

Title: ESR 97-00758, Emergency Diesel Generator (EDG) Control Panel Drawing Corrections

Description:

ESR 97-00758 makes corrections to design drawing 2166-G-039 and associated FSAR Figure 8.3.1-1. This drawing and FSAR figure were not properly revised to show the correct EDG breaker trip logic as designed and implemented by a previous modification ESR 97-00005. ESR 97-00758 will revise these documents to maintain proper configuration between actual plant configuration and these documents.

Safety Summary:

This activity is a document change only in that the EDG breaker trip logic was previously evaluated by ESR 97-0005, Safety Evaluation #97-174, and the NRC's SER for Harris Operating License Amendment No. 72. This change only corrects documents to provide consistency between the documents and the actual field condition. No physical changes to any SSCs are being made. This change does not increase the probability or consequences of accidents or malfunctions of equipment previously evaluated, does not introduce a different type of accident or malfunction of equipment, and does not reduce any margin of safety. Therefore, the change does not involve an unreviewed safety question.

Title: ESR 99-00097, Aluminum/Zinc in Containment

Description:

This change evaluates the precautions and limitations that apply to the addition of Zinc and Aluminum inside the reactor containment building during Modes 1 and 2. ESR 99-00097 determined that additional Zn/Al beyond the original 1400 lb analyzed design limit can be temporarily added to the reactor containment building provided the governing Technical Specification rules are followed.

Safety Summary:

This evaluation determined that additional Aluminum or Zinc can be added to reactor containment building provided the additional amount is within the capacity of one recombiner unit. Thus, with the additional Aluminum or Zinc in place and two hydrogen recombiners operable, the hydrogen gas concentrations will be kept below analyzed values. Therefore, this change does not increase the probability or consequences of analyzed accidents, nor introduce a different type of accident or equipment malfunction. The proposed change does not decrease the margin of safety as described in the Technical Specifications. Therefore, no unreviewed safety question exists.

Title: ESR 9800559, Permanent capping of 1RC-10 (2RC-V10SN-1)

Description:

ESR 9800559 Rev. 0 accepts temporary modification 9700508 as a permanent condition. The Reactor Coolant System (RCS) Loop B Hot Leg to Sampling System (1RG10) has its handwheel removed and a seal cap installed as a leakage boundary (valve has stem leakage). 1RC -10 is in the open position. The functions of the valve are to maintain RCS integrity and to provide an isolation boundary for local leakrate testing of containment penetration M-78A.

The isolation boundary function is now provided by valve 1SP-945. The isolation boundary function is not a safety function but a mechanism to establish conditions for testing.

Safety Summary:

Valve 1RC-10 was modified to remove the associated handwheel and provide a cap for the valve stem. The safety related function of this valve is to provide RCS integrity. The seal cap installed meets all design requirements for maintaining RCS integrity, including the seismic, stress, and pressure-retaining capabilities. The non-safety related function of providing an isolation to facilitate local leakrate testing of penetration M-78A is accomplished by valve 1SP-945. Therefore, this change will not increase the probability or consequences of accidents or malfunctions of equipment previously evaluated, will not introduce a different type of accident or malfunction of equipment, and will not reduce any margin of safety. Therefore, the change does not involve an unreviewed safety question.

Title: Pipe Loading Combinations

Description:

This change revises FSAR Table 3.9.3-7, "Design Loading Combinations for Non-NSSS Supplied ASME Code Class 2 and 3 Piping," by replacing addition signs with commas between the different load cases that are to be considered for the conditions listed. The addition sign nomenclature created confusion by implying that the load cases were to be algebraically added together. Rather, these loads are to be combined in an appropriate method in accordance with design specifications. This change is consistent with FSAR Table 3.9.3-1 for Class 2 and 3 NSSS-supplied components.

Safety Summary:

There are no physical changes being made to the plant as a result of this change. This activity does not alter the methodology of load combinations for piping and does not change the design basis of the piping. The FSAR change is a documentation change only which provides clarification of piping load combinations that is consistent with the ASME Section III Code and the Standard Review Plan. The change does not affect plant equipment or operating parameters. This FSAR change will not increase the probability or consequences of accidents or malfunctions of equipment previously evaluated, will not introduce a different type of accident or malfunction of equipment, and will not reduce any margin of safety. Therefore, the change does not involve an unreviewed safety question.

Title: AOP-004 Revision 16, Remote Shutdown

Description:

This change to AOP-004 does three things. First, the Charging Safety Injection Pump is secured until a manual valve lineup can be performed to protect the pump from damage. Second, excess letdown is isolated to prevent a loss of reactor coolant system or makeup system Remote Shutdown inventory. Third, steam generator blowdown is isolated to ensure that there is sufficient makeup capability for the Turbine-Driven Auxiliary Feedwater Pump.

Safety Summary:

This revision to AOP-004 protects plant equipment and preserves primary water and secondary water inventory. These changes ensure that the assumptions in the Safety Evaluation Report and the Safe Shutdown Analysis are met. Therefore, this change does not increase the probability or consequences of analyzed accidents, nor introduce a different type of accident or equipment malfunction. The proposed change does not decrease the margin of safety as described in the Technical Specifications. Therefore, no unreviewed safety question exists.

Title: PPP-201, Precision Condensate Pump Performance Test – Procedure Cancellation

Description:

This activity is the cancellation of the “Precision Condensate Pump Performance Test” which is no longer conducted.

Safety Summary:

System engineers trend data from appropriate sources to monitor and determine Condensate Pump performance. Cancellation of the Condensate Pump performance test procedure does not change plant procedures as described in the FSAR. A periodic Condensate Pump performance test is not required for any initiating or mitigating system. No FSAR Chapter 15 analyzed accident is associated with the requirement to routinely conduct a condensate pump performance test. This activity does not increase the probability or consequences of accidents or malfunctions of equipment previously evaluated, does not introduce a different type of accident or malfunction of equipment, and does not reduce any margin of safety. Therefore, the change does not involve an unreviewed safety question.

Title: PPP-204, Feedwater Heater Performance Test – Procedure Cancellation

Description:

This activity is the cancellation of the "Precision Feedwater Heater Performance Test" which is no longer conducted.

Safety Summary:

System engineers trend data from appropriate sources to monitor and determine Feedwater heater thermal performance. Cancellation of the Feedwater heater performance test procedure does not change plant procedures as described in the FSAR. A periodic Feedwater heater thermal performance test is not required for any initiating or mitigating system. This activity does not increase the probability or consequences of accidents or malfunctions of equipment previously evaluated, does not introduce a different type of accident or malfunction of equipment, and does not reduce any margin of safety. Therefore, the change does not involve an unreviewed safety question.

Title: ESR 99-00079, Waste Processing Building Ventilation Exhaust System Flow Rates - HVAC

Description:

This activity changes the operation of the Waste Processing Building Normal Exhaust System (WPBNES). This change specifies three (3) fans operating at 49,333 acfm each instead of four (4) fans at 37,000 acfm as previously designed. The flow output of the fans was increased to eliminate severe flow induced vibration in the ductwork. With the increase of the individual fan flowrate, only 3 fans are required to be operating to obtain the design system flow. FSAR Sections 9.4 and 12.4 are revised to reflect this change.

Safety Summary:

WPBNES is not an accident initiating system. Additionally, WPBNES is not an accident mitigating system. This change does not adversely affect any accident initiating system nor any accident mitigating system. The function of the WPBNES is not altered by this change. This change does not affect any Technical Specification system. Therefore, the probability and consequences of an accident have not increased. The probability and consequences of equipment malfunction important to safety has not increased. A new and different type of accident or equipment malfunction that is important to safety has not been created. The Margin of Safety as defined in the Technical Specification Bases has not decreased. No unreviewed safety question is introduced by this change.

Title: ESR 99-00142, Essential Services Chilled Water System Operability Evaluation

Description:

ESR 99-00142 provides justification of operability for Essential Services Chilled Water System with all eight of the NNS isolation valves (1CH-115, 1CH-116, 1CH-125, 1CH-126, 1CH-148, 1CH-149, 1CH-196 and 1CH-197) placed in the shut position. These valves are to remain in the shut position until new actuators are installed which ensure adequate operation of the valves. The current valve actuators have been determined to be undersized and cannot guarantee positive shutoff isolation of the chilled water going to the non-safety related air handler units in the RAB, which is their safety related function.

Safety Summary:

The design function of the Chilled Water System is to mitigate accident conditions by providing chilled water to associated safety related air handling units. Allowing the eight NNS isolation valves to remain shut until actuator replacement ensures the system retains its ability to perform this function and does not affect the safety design/function of other plant equipment. The fail safe position for these valves is shut. The equipment cooled by the isolated NNS air handling units are not important to safety, nor support or affect safety equipment. Therefore, this activity does not increase the probability or consequences of accidents or malfunctions of equipment previously evaluated, does not introduce a different type of accident or malfunction of equipment, and does not reduce any margin of safety. Therefore, the change does not involve an unreviewed safety question.

Title: Physical Security and Safeguards Contingency Plan, Revision 0**Description:**

This is a 10 CFR 50.54(p) change to the HNP Physical Security and Safeguards Contingency Plan. The revision consists of administrative changes that are clerical in nature to clarify titles for consistency and correct grammar. The plan is changed from a generic plan applicable to both Brunswick and Harris Nuclear Plants to a site specific plan and deleted all references to the Brunswick Plant. The minimum number of Armed Guards/Responders per shift are changed to support the defensive strategy demonstrated during the Operations Safeguards Readiness Evaluation (OSRE). The change identified the addition of razor ribbon on top of the Protected Area Barrier and razor concertina ribbon in the isolation zones. The changes included revisions to requirements addressed in 10 CFR 73.55 concerning the changing of cores in security doors and validation of the authorized access list. The change also addresses the escorting of personnel and vehicles between Plant Protected Areas. The time for removal of favorably terminated personnel or those who no longer require unescorted access from the authorized access list has been changed.

Safety Summary:

The changes being made to the HNP Physical Security and Safeguards Contingency Plan do not impact, directly or indirectly, any safety related systems, components or equipment. As such, this activity does not increase the probability or consequences of accidents or malfunctions of equipment previously evaluated, does not introduce a different type of accident or malfunction of equipment, and does not reduce any margin of safety. Therefore, the change does not involve an unreviewed safety question.

Title: Administrative Revision to FSAR Figures 10.1.0-05 and 10.2.2-06

Description:

An administrative revision (AR) is being made to design drawings 2165-G-0046 (FSAR Figure 10.1.0-05) and 2165-G-0088 (FSAR Figure 10.2.2-06) to correct an inappropriate cross reference contained in a reference flag on the drawings. The AR will provide reference to the appropriate diagrams for detail regarding the Heater Drain Pump Seal Water.

Safety Summary:

This subject of this AR deals with an inappropriate cross reference on flow drawings. B The specific system is the Heater Drain Pump Seal Water, which is non-safety related. The AR is only making a cross reference change to the appropriate flow diagram for the subject drawings. No changes are being made to any plant equipment. This change does not increase the probability or consequences of accidents or malfunctions of equipment previously evaluated, does not introduce a different type of accident or malfunction of equipment, and does not reduce any margin of safety. Therefore, the change does not involve an unreviewed safety question.

Title: ESR 9700186, Primary Sample Panel Drain Routing

Description:

The activity evaluated is the routing of the Primary Sample Panel drain line to the Radioactive Floor Drain (RFD) System. The Primary Sample Panel drain line is currently draining to the Radioactive Floor Drain System instead of draining to the Radioactive Equipment Drain (RED) System as shown per design drawings.

Safety Summary:

The materials, design pressure and temperature used for the RFD the RED Systems are the same and therefore interchangeable. The additional waste to the RFD System was evaluated and was found to be acceptable. The gravity flow plumbing and drainage side of these systems serve no safety functions and are not required to for safe shutdown or support any system for safe shutdown. Therefore, this change does not increase the probability or consequences of analyzed accidents, nor introduce a different type of accident or equipment malfunction. The proposed change does not decrease the margin of safety as described in the Technical Specifications. Therefore, no unreviewed safety question exists.

Title: Garlock Expansion Joint Replacement

Description:

This change revises FSAR Section 10.4.5.3 by deleting statements that are at a level of detail not required in the FSAR regarding circulating water expansion joints. Several Mercer expansion joints were replaced with Garlock expansion joints in the circulating water and cooling tower makeup systems. The Garlock expansion joints have been evaluated to be equivalent replacements.

Safety Summary:

The Garlock expansion joints were evaluated to be equivalent in form, fit and function to the Mercer expansion joints. The Garlock joints were manufactured within the design criteria specified in design-basis documents. The new expansion joints have no adverse impact on the FSAR evaluated accident conclusions, and do not introduce new accident scenarios. This FSAR change will not impact the operation of the circulating water or cooling tower makeup systems. The FSAR change does not increase the probability or consequences of accidents or malfunctions of equipment previously evaluated, does not introduce a different type of accident or malfunction of equipment, and does not reduce any margin of safety. Therefore, the change does not involve an unreviewed safety question.

Title: ESR 96-00319, Crud Cleanup Vessel Storage

Description:

The activity evaluated is the operation of crud cleanup equipment in the "D" Spent Fuel Pool (SFP) and adjacent transfer canal areas. "Crud" in this context is generally comprised of activated corrosion products which are sloughed off transshipped spent fuel assemblies as they are first introduced into the Harris Plant cask loading pool. The equipment, a vacuum cleaner arrangement, consists of a vacuum head, vacuum pump, crud collection vessels and a backbump pump connected by flexible hoses. The equipment is not permanent plant, rather it will be staged and operated on an as need basis. The crud collection vessels will be stored underwater in a dormant area of the "D" SFP or the transfer canal area.

Safety Summary:

The equipment associated with crud cleanup will not be installed in the proximity of fuel assemblies, such that it could cause damage to cladding or other safety related attributes of fuel. Materials of construction are such that chemical interactions with spent fuel and connected systems will not initiate mechanisms which would result in degradation. None of the components associated with this equipment as supplied exceed the weight limitation necessary to be considered a "heavy load." This activity does not increase the probability or consequences of accidents or malfunctions of equipment previously evaluated, does not introduce a different type of accident or malfunction of equipment, and does not reduce any margin of safety. Therefore, the change does not involve an unreviewed safety question.

Title: ESR 97-00638 Revs. 0 and 1, Installation of a temporary fuel service elevator and a Gamma Scan Collimator/Detector in the Units 1 & 2 Spent Fuel Pool Transfer Canal

Description:

This ESR provides for a temporary fuel service elevator needed in order to support fuel inspections and fuel reconstitution. The elevator will be manufactured and installed by Siemens Power Corporation (SPC). The elevator is to be located on the concrete island between the Units 1 & 4 transfer canal and the new fuel pool (fuel pool "A"). The installation will be performed in accordance with vendor procedures, site specific procedures and ESR # 97-00638. Once the activities associated with the elevator are complete, the elevator will be removed and returned to SPC.

Revision 1 of this ESR provides an evaluation for placing a gamma scan collimator/detector in the units 1 & 4 transfer canal. The collimator/detector is suspended in the water from a mechanism that sits on the concrete island between the units 1 & 4 transfer canal and the new fuel pool (pool "A"). Once the activities associated with the collimator are complete, the collimator/detector will be removed and returned to Siemens Power Corporation (SPC).

A separate 10CFR50.59 screen and USQD were prepared for ESR 97-00638, rev. 1 because this ESR revision added scope to the ESR that was not covered under the 10CFR50.59 screen/USQD for revision 0. In addition, REG-NGGC-0002 was substantially revised since the existing 10CFR50.59 screen/USQD approval.

Safety Summary:

The temporary fuel service elevator is needed in order to support fuel inspections and fuel reconstitution. The elevator will be manufactured and installed by Siemens Power Corporation (SPC). The installation will be performed in accordance with vendor procedures, site specific procedures, and ESR 97-00638. The fuel service elevator may be used for fuel reconstitution, fuel maintenance and fuel inspections. The fuel service elevator shall only be used when all other fuel movement in the Fuel Handling Building (FHB) is suspended until the fuel assembly is removed from the elevator. Once the activities associated with the elevator are complete, the elevator will be removed and returned to SPC. The FSAR describes the fuel handling system but does not describe the usage of a fuel service elevator for fuel assembly inspections or fuel assembly reconstitution. This activity does not change the FSAR. No changes to procedures as described in the FSAR are required due to this activity since the FSAR does not describe the use of a fuel service elevator and the use of the fuel service elevator does not impact any procedures described in the FSAR. The elevator is not a permanent change to the facility. The elevator will be used to aid in fuel inspection and fuel reconstitution, which are not considered tests or experiments so no test or experiment not described in the FSAR are involved in this activity.

The collimator/detector is positioned such that it will not sit on or fall on spent fuel, and the safe loading path for the collimator/detector components does not pass over any spent fuel. A review of the falling force for the collimator/detector has been conducted. The shear force and bending

moment that potentially could be generated from the collimator/detector falling into the transfer canal are bounded by that evaluated for the fuel service elevator in ESR 97-00638, revision 0, which are substantially less than the punching shear capacity and ultimate bending moment of the massive twelve-foot thick reinforced concrete slab that supports the transfer canal floor.

The collimator/detector requires approximately 10 gallons per hour (gph) of demineralized water as a positive means of keeping borated water away from the detector. The demineralized water is exhausted to the transfer canal. The ESR evaluated the addition of demineralized water to the spent fuel pools via the collimator as acceptable.

This activity does not affect the ability to maintain water over the spent fuel or cool the fuel pools. The design-basis FSAR fuel handling accident in the Fuel Handling Building involves the dropping of a PWR fuel assembly and handling tool onto a PWR fuel assembly in a storage rack. The dropped fuel assembly then falls onto up to 52 BWR fuel assemblies. The analysis assumes that all of the fuel rods in the dropped assembly fail, fifty rods fail in the impacted PWR assembly in storage, and all of the rods in the impacted BWR assemblies fail. This design basis accident involves more than one fuel assembly while there will be only one fuel assembly in the fuel service elevator, thus there is only one complete fuel assembly involved (one fuel assembly minus one fuel rod in the elevator, and one fuel rod being examined by the collimator/detector), and this scenario is bounded by the FSAR analysis in chapter 15. Since an accident involving this equipment is bounded by the more severe case described above and there is no impact on any systems used to mitigate the consequences of an accident, there is no increase in the probability of occurrence, nor the consequences of an accident previously evaluated in the FSAR.

The installation and use of the collimator/detector do not affect the reactor coolant pressure boundary, equipment required to safely shut down the reactor, or equipment required to prevent or mitigate the consequences of accidents, which could result in potential offsite exposures comparable to the guidelines of 10CFR100. The collimator/detector does not affect fuel pool cooling or the ability to maintain the fuel pool water level. In addition, the safe load path does not allow the collimator/detector components to be carried over safety-related equipment or spent fuel. This prevents any interaction with safety-related equipment during installation and removal of the collimator/detector. Based on the mounting location for this equipment, during a seismic event, neither the collimator/detector, nor its components will fall into fuel pool "A". Any failure of the collimator/detector in the transfer canal will not affect the performance or operation of any systems, structures, or components important to safety. The activity does not increase the probability of occurrence of a malfunction, nor the consequences of a malfunction of equipment important to safety as previously evaluated in the FSAR. No new or different type of accident is created based on this activity since load dropping events are analyzed and loss of water level is also analyzed. Neither is the possibility of malfunctions to equipment important to safety increased nor the margin of safety as described in Technical Specifications reduced based on the above discussion.

No unreviewed safety question results from this ESR in either revision 0 or 1.

Title: Revision to FSAR Figure 1.2.2-84, Tank Building General Arrangement**Description:**

An administrative revision (AR) is being made to design drawings 2165-G-0033 (FSAR Figure 1.2.2-84), the Tank Building General Arrangement drawing, to reflect existing platforms attached to the Condensate Storage Tank and the Reactor Make-up Water Storage Tank. These platforms were removed from the drawing prior to plant start-up but were never removed from the tanks. These platforms are used to access equipment, and perform inspections. These platforms were fabricated and installed per approved design.

Safety Summary:

The subject of this AR deals with properly documenting platforms attached to the Condensate Storage Tank and the Reactor Make-up Water Storage Tank on the appropriate general arrangement drawing. The platforms have been installed since the late 1970's and were fabricated and installed per approved design drawings. Minor work is being done to the Reactor Make-up Water Storage Tank platform to restore it to its original design. These platforms already appear on FSAR Figures 3.11B-15, 3.11B-29 and 3.8.4-21. The two subject platforms are attached to embedded plates in the Tank Building walls which are seismic class I. This change does not increase the probability or consequences of accidents or malfunctions of equipment previously evaluated, does not introduce a different type of accident or malfunction of equipment, and does not reduce any margin of safety. Therefore, the change does not involve an unreviewed safety question.

Title: MMM-020, Rev. 28, "Operation, Testing, Maintenance and Inspection of Cranes and Special Lifting Equipment" Procedure Revision

Description:

This activity is the revision of MMM-020 and is being performed in order to include all of "C" Spent Fuel Pool as a safe load area. Attachment 6 delineates the safe load path for portions of the Fuel Handling Building. In the current revision of MMM-020 (rev. 27), revised per ESR 97-0063, the "C" Spent Fuel Pool has approximately 30 % of the West side of the pool shaded as a safe load path. Previously PCR 4517 contained a sketch that delineated approximately 50 % of the pool area of "C" Spent Fuel Pool as a safe load path. Presently, neither spent fuel nor safety related equipment is located in the "C" Spent Fuel Pool.

Safety Summary:

FSAR section 9.1.2-2 states "...Handling equipment capable of carrying loads heavier than a fuel assembly is prevented by interlocks or administrative controls, or both, from traveling over the fuel storage area." Administrative controls are maintained by MMM-020. This change extends the MMM-020 safe load path to include the entire area in the "C" Spent Fuel Pool.

This revision of MMM-020 increases the boundaries of the safe load path. The various types of controls for restricting the boundaries for safe movement of heavy loads are described in the FSAR as indicated above. This revision to MMM-020 will not create the possibility of an accident of a different type than previously evaluated, since the administrative controls continue to provide sufficient separation between the heavy loads and either spent fuel or safety related equipment. The revision to MMM-020 makes changes to the safe load path area in the "C" Spent Fuel Pool but maintains adequate separation between heavy loads and either safety related equipment or spent fuel. No equipment modification to safety related equipment or equipment important to safety will be performed. Since the revised MMM-020 does not include any area for carrying loads over any spent fuel or safety related equipment, the margin of safety, as defined in the Technical Specifications will not be reduced. Based on maintaining the design basis requirements and limiting movement of heavy loads, this revision does not increase the probability of occurrence or the consequences of an accident previously evaluated in the FSAR. Likewise, neither the probability of occurrence nor the consequences of a malfunction of equipment important to safety will be increased as a result of this revision based on maintaining control of the path for heavy load movements so that no passage over spent fuel, safety related equipment, or equipment important to safety will occur. No unreviewed safety question results due to this revision to MMM-020.

Title: Reactor Vessel Inservice Surveillance

Description:

The activity evaluated is a correction to FSAR Section 5.3.3.7 regarding inservice inspection of the reactor vessel. This section currently states that reactor vessel closure head is examined visually during each refueling outage. Neither ASME Section XI, nor the current Inservice Inspection Program requires this visual examination during each refueling outage. FSAR Section 5.3.3.7 is revised to state that the closure head can be examined visually. This is consistent with wording elsewhere in the FSAR and with ASME Section XI requirements.

Safety Summary:

This change revises the FSAR to be consistent with ASME Section XI, Technical Specification and Inservice Inspection Program requirements. No changes are being made to the operation of the plant or to any plant equipment. The currently performed inspections are adequate to assure reactor vessel integrity, and changing the FSAR so that a visual inspection of the closure head is not required each refueling outage will not adversely impact the ability of the reactor vessel to perform its function as the RCS pressure boundary. This change does not increase the probability or consequences of accidents or malfunctions of equipment previously evaluated, does not introduce a different type of accident or malfunction of equipment, and does not reduce any margin of safety. Therefore, the change does not involve an unreviewed safety question.

Title: ESR 97-00680, HVAC Bag Filter Replacement

Description:

ESR 97-00680, HVAC Bag Filter Replacement, allows replacement of the current fiberglass media pre-filters and medium efficiency filters for the non-safety , Q-Class E air filtration units at HNP with newer and more efficient synthetic media filters.

Safety Summary:

The affected systems are the non-safety HVAC units associated with the Waste Processing Building, Reactor Auxiliary Building, Fuel Handling Building, Security Building, Containment Purge and Turbine Building Ventilation Systems. None of the systems are accident initiating or mitigating systems. The function of the affected equipment is not being modified. This ESR will help eliminate past filter failures by replacing the pre-filters and medium efficiency filters with filters that have a higher resistance rating. This change does not increase the probability or consequences of accidents or malfunctions of equipment previously evaluated, does not introduce a different type of accident or malfunction of equipment, and does not reduce any margin of safety. Therefore, the change does not involve an unreviewed safety question.

Title: ESR 96-00360, 2165-S-548 and FSAR Revision

Description:

ESR 96-00360 updates drawing CPL-2165-S-548 and FSAR Figure 9.2.1-2 to reflect the current configuration of instrument isolation valves 1CW-18, 1CW-20, 1CW-23, and 1CW-25 in the Circulating Water System. These valves are currently shown normally open with pressure test connections. These test connections were removed in 1995 and the valves were shut. This change will update the drawing to indicate the test connection removal and the valves normally closed. Additionally, a valve tagging error is being corrected.

Safety Summary:

This change will restore the proper configuration of these four valves to drawing 2165-S-548 and FSAR Figure 9.2.1-2. The condenser and the Circulating Water System are non safety related and are not initiating or mitigating systems required to operate for safe shutdown of the plant. This change does not increase the probability or consequences of accidents or malfunctions of equipment previously evaluated, does not introduce a different type of accident or malfunction of equipment, and does not reduce any margin of safety. Therefore, the change does not involve an unreviewed safety question.

Title: New Dose Assessment Code**Description:**

The proposed activity evaluated is a new dose assessment code, Dose Assessment and Protective Action Recommendation (DAPAR). The current dose assessment code, CPLDOSE, is not Y2K compliant. A new code, DAPAR, was developed that is compliant with Y2K. EPM-600, "Dose Assessment Technical Basis," was developed to implement the DAPAR code and to relocate the dose assessment technical basis out of PLP-201, "Emergency Plan," and make it a stand alone document. In addition, various other procedures were revised with associated changes: (1) PEP-340 was revised to incorporate instructions for the use of the software, (2) core damage assessment was removed from PEP-340 and placed in PEP-342, and (3) PEP-270 was revised to update the dose code name and provide user checklist updates and clarifications. During the development of the DAPAR code, the opportunity was taken to streamline the user data input and make it more user friendly than the current product. Two assessment methods were developed: full assessment and quick assessment. Full assessment is for use by the Emergency Operations Facility dose assessment personnel and provides a broader range of selection criteria for the assessment. Quick assessment is for use by the Control Room and provides limited selection of possible parameters with conservatism built in and is laid out for rapid use.

Safety Summary:

The activity evaluated is a new dose assessment code, DAPAR. The DAPAR software was developed for design basis accidents, and this software assists in achieving the goal of protection of the public. The FSAR describes accident source term for in-plant shielding requirements, but does not direct source term for dose assessment in the event of an accident. The ability to provide dose assessment and protective action recommendations would continue with the new dose assessment software. The ability to more rapidly provide a dose assessment would enhance the ability to mitigate the consequences of an accident. No plant manipulations or changes to equipment are addressed in this dose assessment procedure or in the revision of the Emergency Plan, implementing procedures or maintenance procedures. No acceptance limits or limiting plant values were involved in the dose assessment procedure or the revision of the Emergency Plan or other procedures. The effectiveness of implementing the Emergency Plan and these associated procedures has not been reduced. In summary, this change does not increase the probability or consequences of accidents or malfunctions of equipment previously evaluated, does not introduce a different type of accident or malfunction of equipment, and does not reduce any margin of safety. Therefore, the proposed activity does not involve an unreviewed safety question.

Title: PLP-201, Rev. 35, Emergency Plan

Description:

The changes associated with this revision to PLP-201 are partially bounded by Safety Evaluation 99-0431. Safety Evaluation 99-0431 pertains to the changes in the dose assessment software from CPLDOSE to DAPAR. Annex B, Technical Bases of Emergency Dose Projection Program was relocated from PLP-201 and placed in EPM-600, Dose Assessment Technical Basis. Those changes are not addressed in this evaluation.

Safety Summary:

The subject changes to PLP-201 are primarily administrative. The addition of Severe Accident Management Guidelines (SAMG), shift staffing, and contracted organizations changes were made to the emergency plan. No plant systems have been changed. The PLP continues to support the accidents evaluated in the FSAR. The effectiveness of implementing PLP-201 has not been reduced. In summary, these changes do not increase the probability or consequences of accidents or malfunctions of equipment previously evaluated, do not introduce a different type of accident or malfunction of equipment, and do not reduce any margin of safety. Therefore, the proposed activity does not involve an unreviewed safety question.

Title: Correction to FSAR Figure 10.1.0-1, Flow Diagram Main Steam System

Description:

The activity evaluated is a correction to the Auxiliary Feedwater Turbine Driven Pump exhaust floor drain piping line number. The line identification was previously changed from 5MS1-220-1 to 5MS1-255-1, but due to a drafting error the old number was mistakenly put on the base design drawing for Figure 10.1.0-1. This change merely corrects this error.

Safety Summary:

This change merely corrects a piping line number to that specified by the approved plant change document. No changes have been made to the operation of the plant or to any plant equipment under this evaluation. This change does not increase the probability or consequences of accidents or malfunctions of equipment previously evaluated, does not introduce a different type of accident or malfunction of equipment, and does not reduce any margin of safety. Therefore, the change does not involve an unreviewed safety question.

Title: Revision to PEP-270, "Activation and Operation of the Emergency Operations Facility (EOF)"

Description:

The proposed activity evaluated is Revision 5 to PEP-270, "Activation and Operation of the Emergency Operations Facility (EOF)". The changes to PEP-270 are partially bounded by SE 99-0431 (also summarized in this submittal). The remaining changes to PEP-270 that are covered by this evaluation include: (1) clarification of severe accident management roles, (2) removal of one automatic ring down phone, (3) removal of guidance for overtime, (4) addition of guidance related to minimum shift staffing criteria for facility activation, and (5) various other administrative changes.

Safety Summary:

The activity evaluated is Revision 5 to PEP-270. The changes to PEP-270 are partially bounded by SE 99-0431 (also summarized in this submittal). The ability to respond to severe accident conditions with better role definition for the facility leaders would enhance the ability to mitigate the consequences of an accident. Plant systems have not been changed, therefore no design, material or construction standards have changed. Plant manipulations are not addressed in this procedure revision, nor are plant acceptance limits or limiting plant values involved in this revision. In summary, this change does not increase the probability or consequences of accidents or malfunctions of equipment previously evaluated, does not introduce a different type of accident or malfunction of equipment, and does not reduce any margin of safety. Therefore, the proposed activity does not involve an unreviewed safety question.

Title: ESR 99-00184, Drawing Change For CVCS Chiller SW Isolation Valves

Description:

Design drawing 2165-G-047 (FSAR Figure 3.9.2.1-01) shows the four Service Water (SW) isolation valves to the Chemical & Volume Control System (CVCS) Chillers (1SW-179, 180, 204, and 206) as normally open. This has been misinterpreted as meaning that any of the four valves may be open, depending on the desired header alignment. ESR 99-00184 revises the drawing and figure to clarify that only one header is desirable at a given time. The operating procedure only allows alignment to one header.

Safety Summary:

Alignment to one SW header instead of two does not decrease flow to the CVCS chillers below the required flow rate of 414 gpm. The SW system is designed to provide 414 gpm to the CVCS chillers from one header therefore sufficient SW flow would still be provided during normal operation. During Safety Injection, any SW alignment to the CVCS chillers is isolated because any of the four isolation valves that are open will shut (fail shut). These valves are in the IST program and are tested quarterly for stroke time. Therefore, there is no impact regarding SW alignment to the CVCS chillers during an accident. This change does not increase the probability or consequences of accidents or malfunctions of equipment previously evaluated, does not introduce a different type of accident or malfunction of equipment, and does not reduce any margin of safety. Therefore, the change does not involve an unreviewed safety question.

Title: FPP-001, Fire Protection - Conduct of Operations, Revision 19**Description:**

The activity evaluated is a change to FPP-001, Fire Protection - Conduct of Operations. FPP-001 is being revised to change the responsibilities for the Fire Protection Program. The responsibility for the program is being changed from the Superintendent - Operations Support to the Manager - Harris Engineering Support Section and his designee. The procedure will change to the Fire Protection Program Manual and will describe the Fire Protection Program for the Harris Plant, along with responsibilities and components of the program.

Safety Summary:

This procedure change is administrative in nature in that it changes the responsibility for development and implementation of the Fire Protection Program from the Operations Unit to the Harris Engineering Support Section. No changes have been made to the operation of the plant or to any plant equipment under this evaluation. This change does not increase the probability or consequences of accidents or malfunctions of equipment previously evaluated, does not introduce a different type of accident or malfunction of equipment, and does not reduce any margin of safety. Therefore, the change does not involve an unreviewed safety question.

Title: ESR 99-00072, Spent Fuel cask Basket Movement**Description:**

As part of the effort to activate the dormant Spent Fuel Pools C and D, a review of auxiliary systems in the Fuel Handling Building was performed. This review identified a concern over the rigging requirements needed to move empty spent fuel cask baskets in the vicinity of the spent fuel pools. This evolution is performed with a commercial electric hoist, and a yoke specially designed for this purpose. However these items were designed as non-safety related, non-seismic Category I, and not single failure proof.. ESR 99-00072 modifies the procedure used to move the cask baskets to maintain the maximum distance from spent fuel pools C and D. In addition, an analysis was performed to calculate the impact on the spent fuel, in the event that a spent fuel basket accidentally fell into one of the pools.

Safety Summary:

The basket movement is controlled by procedure CM-M0303 to remain outside the 15 foot limit imposed by NUREG-0612 for the majority of the load path. The one location where the baskets are 13.9 feet from the spent fuel pool, if failure occurred the empty basket would fall into the fuel transfer canal and sink to the bottom. If the basket did fall into a spent fuel pool, analysis has shown that the spent fuel will not be damaged beyond the point where radioactive release would exceed 25% of the 10CFR100 limits and criticality would not occur. As such, this activity does not increase the probability or consequences of accidents or malfunctions of equipment previously evaluated, does not introduce a different type of accident or malfunction of equipment, and does not reduce any margin of safety. Therefore, the change does not involve an unreviewed safety question.

Title: ESR 99-00145, Replacement of Plant Air Compressors**Description:**

The activity evaluated is the design for installation of two (2) new oil-free air cooled rotary screw air compressors 1A and 1B and two (2) new heat reactivated desiccant air dryers 1A and 1B for use as part of the normal operating equipment of the Compressed Air System (CAS). The new compressors and air dryers are replacing four (4) existing reciprocating air compressors 1A, 1B, 1C, 1D and two (2) air dryers 1A and 1B. The existing Rotary Air Compressor 1E and associated water-cooled aftercooler 1E will be relabeled as 1C. A new Compressed Air System control panel will be installed for operating these three (3) air compressors.

Safety Summary:

The air compressors, air dryers, piping, tubing and instruments associated with this modification are non-nuclear safety related and Quality Class E. Although there will be fewer compressors than currently, the new compressors are able to supply sufficient capacity of compressed air and the CAS will be more reliable. The four (4) existing reciprocating air compressors have had a history of being unreliable. The new components being installed are in accordance with the applicable design requirements and will not adversely affect existing systems, structures or components. This activity does not increase the probability or consequences of accidents or malfunctions of equipment previously evaluated, does not introduce a different type of accident or malfunction of equipment, and does not reduce any margin of safety. Therefore, the change does not involve an unreviewed safety question.

Title: E&RC Personnel Qualifications

Description:

The activity evaluated is a change to FSAR Section 1.8, R.G. 1.8, Personnel Selection and Training, which clarifies the training and qualification requirements of ANS 3.1 applicable for the Manger - Environmental and Radiation Control, Superintendent - Radiation Protection, and Supervisor - Spent Fuel Management. The change also clarifies the qualification requirements when the Manger - Environmental and Radiation Control or Superintendent - Radiation Protection is the individual designated as the Site Radiation Protection Manager.

Safety Summary:

This change is administrative in nature and only clarifies personnel qualification requirements. This activity does not make any changes to plant equipment nor does it affect the way any equipment is operated. This change to FSAR Section 1.8 does not increase the probability or consequences of accidents or malfunctions of equipment previously evaluated, does not introduce a different type of accident or malfunction of equipment, and does not reduce any margin of safety. Therefore, the change does not involve an unreviewed safety question.

Title: FSAR Figure 7.5.1-6 Title Correction

Description:

The activity evaluated is a change to the title block of FSAR Figure 7.1.5-6 so that the title block references the correct content of the figure. A review of FSAR Section 7.5.1.10.4, indicates that the correct status light box CWD to be depicted on FSAR Fig. 7.5.1-6 is SLB-9. SLB-9 is correctly depicted on Fig. 7.5.1-6, but the title block for the figure incorrectly states SLB-7. This FSAR change has been initiated to correct this error.

Safety Summary:

This change represents an administrative correction to the SAR. No changes have been made to the operation of the plant or to any plant equipment under this evaluation. This change does not increase the probability or consequences of accidents or malfunctions of equipment previously evaluated, does not introduce a different type of accident or malfunction of equipment, and does not reduce any margin of safety. Therefore, the change does not involve an unreviewed safety question.

Title: ESR 98-00223, Pedestrian Bridges at Fuel Handling Building Retaining Wall

Description:

ESR 98-00223 modifies the connection design for two pedestrian bridges at elevation 261' which connect the Unit 3&4 Retaining Wall to the outside Area "K" and "M" stairwell towers. The connection is being changed due to affects caused by horizontal deflection of the retaining wall. The new connection includes a seated beam connection with 2" slotted holes to permit up to 1-1/2" of additional wall movement. ESR 98-00223 also updates FSAR Figure 3.8.4-42 to indicate the location of these two bridges and deletes an indicated bridge located near column line 12 that was never constructed.

Safety Summary:

The Unit 3 & 4 Retaining Wall is seismically designed in accordance with R.G. 1.29 Position C.2 & C.4 but is not safety related. The wall is expected to experience some small lateral deflections. The attachment of these two non-seismically designed pedestrian bridges will not affect any equipment important to safety. The attachment of the pedestrian bridges does not increase the probability or consequences of accidents or malfunctions of equipment previously evaluated, does not introduce a different type of accident or malfunction of equipment, and does not reduce any margin of safety. Therefore, the change does not involve an unreviewed safety question.

Title: ESR 99-00280, Replacement of Pressure Transmitter PT-929

Description:

ESR 99-00280, Replacement of Pressure Transmitter PT-929, replaces Barton pressure transmitter PT-01SI-0929SW with a Rosemount Transmitter. PT-01SI-0929SW is located on Accumulator 1C-SA. It is an ITT Barton model 753 pressure transmitter. The replacement pressure transmitter is a Rosemount model 1154GP8RA pressure transmitter.

Safety Summary:

The replacement transmitter has been tested and qualified and meets the requirements of the original transmitter. The replacement transmitter has been qualified to the EQ requirements for in containment use. Materials of construction are 316SS which is compatible with borated fluids. The function of the transmitter is not affected and the reliability is improved as a result of the replacement. This change does not increase the probability or consequences of accidents or malfunctions of equipment previously evaluated, does not introduce a different type of accident or malfunction of equipment, and does not reduce any margin of safety. Therefore, the change does not involve an unreviewed safety question.

Title: FSAR Description of Start-Up Transformer Impedance and Emergency Bus Loss-of Voltage Relaying

Description:

The activity evaluated is two corrections to the FSAR. FSAR Section 7.3.1.5.1 is being changed to clarify the description of the emergency bus voltage at which the "loss-of-offsite power" undervoltage relays detect "loss of voltage". Instead of stating that loss of offsite power is sensed when the 6.9kv bus voltage falls below 73% of "normal", it will now state that loss of offsite power is sensed when the 6.9 kv emergency bus voltage falls below approximately 70% of rated bus voltage (6900v). This value, 70% of 6900v, agrees with the design basis calculation, setpoint document, relay setting drawings and surveillance test procedures. It is felt that the "existing" FSAR value (73% of "normal") is referring to 73% of motor rated voltage (6600v). 73% of motor rated voltage is 4818v which is approximately equal to 70% of bus rated voltage, i.e. 4830v.

FSAR Section 8.2.1.3 is being changed to provide a more technically correct description of why the Start-Up Transformer impedance is acceptable with respect to ensuring adequate voltage to start and run the Safety Injection Pump motors and related motor operated valve actuator motors under the most limiting conditions. The existing wording states that, since an evaluation exists which demonstrates the ability to start a 9000 hp motor without the motor terminal voltage going below 80% of rated, the 900 hp SI Pump motors would be capable of starting without their terminal voltages going below 75% of rated (their specified starting voltage). This statement will be replaced with reference to the design basis calculations (AC System Voltage Study E-6000 for the SI pumps and AC MOV Torque Calculation E5-0001 for the MOVs) which show the adequacy of the distribution system voltages.

Safety Summary:

The proposed FSAR changes are only clarifications. The emergency bus "loss-of-voltage" undervoltage relay setpoint is not being changed. The description of the setpoint is being changed such that it is expressed in "percent of bus nominal voltage (6900v)" as opposed to "percent of motor rated voltage (6600v)". This will help avoid confusion when comparing the descriptions of the setpoint between the FSAR, Tech Specs, design bases calculations and setpoint documents / drawings. The other proposed FSAR change is to the description how the impedance of the SUT ensures adequate voltage for the SI pump motors and related MOV motors. Currently, the description is a vague comparison with the ability to start and run the 9000 hp Steam Generator Feedwater Pump motors. The proposed description refers to the actual design basis calculations which prove the adequacy of the voltage. Therefore, these changes do not increase the probability or consequences of accidents or malfunctions of equipment previously evaluated, do not introduce a different type of accident or malfunction of equipment, and do not reduce any margin of safety. Therefore, the changes do not involve an unreviewed safety question.

Title: ESR 98-00252, Permanent Cooling of Turbine EH Fluid Reservoir

Description:

The activity evaluated is change to the Turbine EH Fluid system, which supplies hydraulic fluid to the turbine control system, and Normal Service Water system, which supplies cooling water to the Turbine EH Fluid Coolers. The activity changes the set points for TS-01TC-4221, which monitors the temperature turbine EH fluid reservoir and causes a high temperature alarm on the MCB annunciator, from 135°F to 160°F. The change replaces TI-01TA-4201 and relocates the temperature probe, which provides local temperature indication of the reservoir EH fluid. The EH unit cooler normal service water supply and return piping are being modified to allow removal of the piping for cleaning.

Safety Summary:

TS-01TC-4221 will continue to initiate an alarm on the MCR annunciator panel. The set point change from 135°F to 160°F does not affect the alarm, but establishes a normal operating range for the EH fluid based on the systems' critical parameter – o-ring reliability. The replacement of TI-01TA-4201 and the change in location of the temperature probe will result in monitoring the temperature of the EH fluid entering the system where the O-ring reliability is critical. Replacement of TI-01TA-4201 and modifications to the EH cooler service water supply and return piping have been specified in accordance with system design, material and construction standards. The portions of the Turbine EH fluid and Normal Service Water systems affected by the changes are not required for initiation of any engineered safety systems, safe shutdown systems, or any other safety related systems. This activity does not increase the probability or consequences of accidents or malfunctions of equipment previously evaluated, does not introduce a different type of accident or malfunction of equipment, and does not reduce any margin of safety. Therefore, the change does not involve an unreviewed safety question.

Title: Containment Penetration Conductor Protection – FSAR Table 16.3-6

Description:

This FSAR change adds six circuits to FSAR Table 16.3-6 “Containment Penetration Conductor Overcurrent Protective Devices.” Condition Report 99-01721 identified that PCR 2898 made changes to the plant, which were not captured in all of the applicable plant design documents. This evaluation only addresses those changes being made that were missed by PCR 2898. PCR 2898 changed the source of electrical power for the alarm relays and indicating lights for MOVs 1-8701A, 1-8701B, 1-8702A and 1-8702B. The power source was changed from the MCC control power transformer to Power Panels 1A212-SA and 1B212-SB. Since the indicating light circuits pass through Containment electrical penetrations, double overcurrent protection was provided by PCR 2898. However, the “affected document markups” provided with PCR 2898 did not include changes to all impacted documents.

Safety Summary:

Including the six circuits in FSAR Table 16.3-6 is an administrative change. No physical change is being made to the plant. The physical change were previously evaluated and addressed in PCR 2898. This changes doe not increase the probability or consequences of accidents or malfunctions of equipment previously evaluated, does not introduce a different type of accident or malfunction of equipment, and does not reduce any margin of safety. Therefore, the proposed activity does not involve an unreviewed safety question.

Title: Physical Security and Safeguards Contingency Plan, Revision 1**Description:**

This is a 10 CFR 50.54(p) change to the HNP Physical Security and Safeguards Contingency Plan. The revision consists of a change resulting from the Security Computer System upgrade. This change will not permit access to Vital Area doors by an individual using a card reader card that has been used to exit the Protected Area at the exit turnstiles. The only location the card reader will grant entry is at the Protected Area entry turnstiles. Additionally, a change is being made to the required review of the Security Program from at least once every twelve (12) months to once every twenty-four (24) months. This change is the result of final rulemaking (64 FR 14814) published on March 29, 1999 and to be effective April 28, 1999.

Safety Summary:

The changes being made to the HNP Physical Security and Safeguards Contingency Plan do not impact, directly or indirectly, any safety related systems, components or equipment. As such, this activity does not increase the probability or consequences of accidents or malfunctions of equipment previously evaluated, does not introduce a different type of accident or malfunction of equipment, and does not reduce any margin of safety. Therefore, the change does not involve an unreviewed safety question.

Title: ESR 95-00027, Emergency Diesel Generator System Drawing Corrections

Description:

The activity evaluated is a combination of corrections and enhancements to design drawing flow diagrams associated with the Emergency Diesel Generator System. Flow indicators FI-2474A1, A2, B1 & B2 will be relabeled as pressure indicators PI-2474A5, A6, B5, & B6 to agree with the field installed condition. Instrument lines and valves between the starting air tanks mechanical root valves and the starting air pressure switches mounted on the compressors (PS-9670) will be added to the flow diagram. Compressor control components will be tagged per this ESR. Flow diagrams are being revised to show PI-2471 (A/B) and PI-2472 (A/B) and their associated root valves in agreement with other design drawings and the field. Flow diagrams are being revised to show valves 1EA-12, 1EA-27, 1EA-43, 1EA-58, 1DFO-175, and 1DFO-193 as locked open per the applicable operating procedure (OP-155). Flow diagrams will be revised to show valves 1DJO-9/10/19/20, 1DLO-12/69, 1DFO-165/183, and 1EA-185/196 as either closed or capped as applicable to agree with operating procedure (OP-155) valve line ups. The moisture separators that are currently installed on dryers 1A and 1B will be added to the applicable flow drawing. The moisture indicators on the air dryer skid will be shown as abandoned in place, since they are no longer used and the part is obsolete.

Safety Summary:

This ESR is a drawing change only and requires no physical work to the Emergency Diesel Generators Starting Air or Fuel Oil systems, with the exception of tagging requests. The described changes are within plant design criteria and applicable operations procedures. The addition of the locked open valve designations and closing of valves that were normally shown as open brings the flow diagrams in agreement with OP-155 valve line up and actual operating conditions of their respective systems, which decreases potential chances for operator or maintenance errors. These changes do not degrade the reliability, design or function of the Emergency Diesel Generator systems or supporting systems. Therefore, this activity does not increase the probability or consequences of accidents or malfunctions of equipment previously evaluated, does not introduce a different type of accident or malfunction of equipment, and does not reduce any margin of safety. Therefore, the change does not involve an unreviewed safety question.

Title: Correction to FSAR Table 1.6-1, "Topical Reports Incorporated by Reference"

Description:

An administrative change is being made to FSAR Table 1.6-1, "Topical Reports Incorporated by Reference" to remove references to sections which have been previously removed (RAF-2353) from the FSAR.

Safety Summary:

This evaluation is being performed on changes to the FSAR to correct Table 1.6-1 which currently provides incorrect reference sections. No changes have been made to the operation of the plant or to any plant equipment under this evaluation. This change does not increase the probability or consequences of accidents or malfunctions of equipment previously evaluated, does not introduce a different type of accident or malfunction of equipment, and does not reduce any margin of safety. Therefore, the change does not involve an unreviewed safety question.

Title: FSAR Table 6.3.2-9, Correction of Typographical Errors

Description:

The activity evaluated is a correction to FSAR Table 6.3.2-9 "RWST Outflow Large Break – Single Failure." Table Note (9) has the RWST to residual heat removal pump isolation valves listed as 8812A and 8812B. The correct valve designations are 8809A and 8809B. Additionally, Table Note (9) is incorrectly applied to the RWST Isolation step. The correct note for the RWST Isolation step is Note 11. RAF 2665 makes these corrections.

Safety Summary:

The activity is the correction of typographical errors. There are no actual changes being made to the facility. This activity does not increase the probability or consequences of accidents or malfunctions of equipment previously evaluated, does not introduce a different type of accident or malfunction of equipment, and does not reduce any margin of safety. Therefore, the change does not involve an unreviewed safety question.

Title: Reactor Coolant Lithium Control**Description:**

The proposed activity evaluated is a change to FSAR Section 9.3.4.1.2.2, "Reactor Coolant Purification and Chemistry Control," and Section 11.1.6, "Tritium". Additional information is proposed to be added to both sections concerning reactor coolant pH control, lithium concentration limits, and method of lithium control. The proposed change will allow lithium to exceed the specified range per plant procedures if operational constraints prevent the Chemical & Volume Control System demineralizers from being placed in service.

Safety Summary:

The activity evaluated is the addition of information to the FSAR Sections 9.3.4 and 11.1.6 concerning reactor coolant lithium control. This change provides flexibility in maintaining primary chemistry lithium without impacting the integrity of the Reactor Coolant System (RCS). Lithium is used for pH control in the RCS and has no impact on plant equipment. This change will not affect the RCS or any other safety related system connected to the RCS. Operation outside the specified range is allowed for very brief periods and is allowed per the EPRI guidelines for primary chemistry control. This change is not a special test or experiment that is not described in the SAR. This change does not add or delete any safety related structures, systems or components, and does not change the way in which current equipment operates. This change does not affect the level of control of radioactive effluents as required by regulations, nor does it impact the accuracy or reliability of effluents, dose or setpoints. In summary, this change does not increase the probability or consequences of accidents or malfunctions of equipment previously evaluated, does not introduce a different type of accident or malfunction of equipment, and does not reduce any margin of safety. Therefore, the proposed activity does not involve an unreviewed safety question.

Title: ESR 99-00727, Replacement of Emergency Service Water Valves

Description:

The activity is a modification that replaces three emergency service water valves (1SW-9, 1SW-10, and 1SW-86). The current valves are dual-disc check valves with bodies and plates manufactured of carbon steel. Prolonged exposure to raw water has severely corroded these valves. Although the replacement valves are manufactured by a vendor other than that which supplied the original valves, the replacement valves are made from the same drawings (i.e. same form, fit, and function). However, the replacement valves are manufactured of stainless steel, which has much better corrosion resistance in raw water than does carbon steel. Thus, the replacement valves represent an improvement over the current valves. There are some minor design differences in the internals of the replacement valves that do not affect the form, fit, or function of these valves. These differences are evaluated by the ESR as being acceptable. During preparation of this ESR, it was noted that the model number for 1SW-220 is incorrect in the FSAR; this ESR revises the FSAR to include the correct model number.

Safety Summary:

The activity replaces three Emergency Service Water check valves with valves of the same design but of a different body and plate material. The Emergency Service Water system is an accident-mitigation system. The replacement check valves are of the same form, fit, and function as the current check valves. The replacement valves are manufactured of stainless steel, which has much better corrosion resistance in raw water than does carbon steel as the current valves. The material difference and other minor differences in the valve's internals neither affect the ability of the valves to perform their function nor increases the chance of failure. Thus, the activity does not increase the probability or consequences of accidents or malfunctions of equipment previously evaluated, does not introduce a different type of accident or malfunction of equipment, and does not reduce any margin of safety. Therefore, the change does not involve an unreviewed safety question.

Title: Duplication of Technical Specification (TS) Requirements to the FSAR

Description:

This change duplicates certain HNP TS Chapter 6 requirements to Chapter 17 of the FSAR. These requirements include Review and Audit requirements, Procedure review, PNSC, NAS, and Record Retention. This change is administrative in that SSC's are not being modified as a result of this change. Since this is a duplication of requirements in the HNP TS, the plant Licensing Basis is not being change.

Safety Summary:

This change is administrative in that requirements are being duplicated from one document to another. There are no physical changes being made to any SSC as a result of this activity. Therefore, this change does not increase the probability or consequences of analyzed accidents, nor introduce a different type of accident or equipment malfunction. The proposed change does not decrease the margin of safety as described in the Technical Specifications. Therefore, no unreviewed safety question exists.

Title: ESR 97-00738 Rev. 0, Engineering Assessment of HNP Safe Shutdown Analysis in Case of Fire

Description:

This ESR implements documentation changes resulting from an assessment of the plant's safe shutdown program completed September 10, 1997. The ESR corrects discrepancies between the safe shutdown analysis (SSA) and supporting documentation, and clarifies information in the SSA.

Safety Summary:

The ability of the plant to achieve post fire safe shutdown has not been impacted by the changes implemented by this ESR. The changes do not increase the probability or consequences of accidents or malfunctions of equipment previously evaluated, do not introduce a different type of accident or malfunction of equipment, and do not reduce any margin of safety. Therefore, the proposed activity does not involve an unreviewed safety question.

Title: ESR 99-00052, Refueling Cavity Stair Storage

Description:

The activity evaluated is the installation of a spiral staircase in the Containment Building refueling cavity during Modes 5 and 6 to enhance personnel safety. During Modes 1-4 the spiral staircase will be in a seismically designed storage location inside the Containment Building.

Safety Summary:

The consequences associated with a fuel handling accident remains unchanged. During the time the stair will be installed in the refueling cavity the Integrated Reactor Vessel Head (IRVH) will be installed on the reactor making it impossible for the stair to have any impact on fuel assemblies. In the unlikely event the stair were to topple and fall onto the IRVH, due to the stair's light weight, there would be no affect on control rod position. Any unlikely damage to the refueling cavity liner would be evaluated and appropriate corrective actions taken prior to flooding the cavity and requiring the function of the water tight membrane. When the IRVH is removed and the fuel is susceptible to damage the stair will be installed in a temporary storage location in accordance with plant procedures to prevent any adverse impact with safety related components. During Modes 1-4 the stair will be installed in a seismically designed storage location such that there will be no impact to a safety related function. This change does not increase the probability or consequences of accidents or malfunctions of equipment previously evaluated, does not introduce a different type of accident or malfunction of equipment, and does not reduce any margin of safety. Therefore, the change does not involve an unreviewed safety question.

Title: ESR 98-00530, Compilation of the Results of Generic Letter 89-13 Tests and Inspections

Description:

This ESR compiles the results of Generic Letter (GL) 89-13 tests and inspections completed primarily during RFO-8. The document summarizes the results and provides programmatic recommendations regarding the scope and frequency of the Generic Letter 89-13 program.

Safety Summary:

The Generic Letter 89-13 (Service Water,) Program is defined and controlled via site procedure PLP-620. As required in PLP-620, upon completion of each refueling outage, an evaluation will be performed to evaluate the cycle's testing and inspection results and provide appropriate recommendations for program improvements. ESR 98-00530 evaluates the GL 89-13 inspection and test results completed up to, and during RFO-8. All recommended changes via ESR 98-00530 are intended to optimize and enhance system performance and create no adverse impact on plant safety.

The program ensures that the service water related systems remain reliable. The program is designed to increase reliability by ensuring routine maintenance and testing is conducted. Minor changes to the scope of the program are made based on the evaluations, as are frequency changes, which are based upon actual results of plant conditions.

The evaluation provides recommended changes to the scope of the service water program. These changes are intended to optimize the amount of testing/inspections created by the program without adverse effects to the respective systems. This program is a system maintenance program that ensures that the service water system and related systems are properly maintained and can perform their required safety function when needed.

Based on the above discussion, no increase in the probability of occurrence or consequences of an accident previously evaluated in the FSAR is created. The probability of occurrence, and the consequences of a malfunction of equipment important to safety are not increased. No new types of failures to equipment important to safety are introduced due to the program. No new accident types different from those already evaluated in the FSAR are introduced as a result of the program. And the margin of safety as defined in the basis for any Technical Specification is not reduced. Based on this discussion, no unreviewed safety question is involved due to this activity.

Title: ESR 97-00523, Auxiliary Boiler "B" Derating**Description:**

This activity is to derate the "B" Auxiliary Boiler due to excessive steam production capacity, which has created maintenance and chemistry problems for the boiler.

Auxiliary boilers "A" and "B" were originally designed for a 4 unit plant. The capacity of each boiler is 71,000 lb/hr. The boilers have experienced degradation over time due to inadequate maintenance and chemistry control. The objective of this modification is to utilize the "B" boiler for future plant shutdown steam needs by derating it from a steam capacity of 71,000 lb/hr to a maximum of 40,000 lb/hr, to allow for a single unit plant steam demand. Derate changes include: 1) changes to the input to the fuel oil nozzle and to the Forced Draft (FD) fan assembly (both contribute to a lower combustion heat input to the water tubes), 2) replacement of the Burner Fuel Oil controller, and 3) replacement of the source of atomizing air from the air pump (compressor) in the burner console to a Service Air (SA) source. This ESR is working in conjunction with the Mud-Drum Heater modification (ESR 96-00103) and the modification to remove the economizer from service (ESR 99-00317).

Safety Summary:

The auxiliary boilers are not described in the FSAR but they are briefly mentioned as a source of Auxiliary Steam. They are not mentioned in the plant SER and Licensing Documents and do not show up on FSAR figures. The portion of Service Air (SA) supplying the auxiliary boiler area is not described in the FSAR, SER and Licensing Documents and does not show up on the FSAR figures. The new burner and fan equipment, as well as the SA piping and components, do not have any procedures described in the FSAR.

Installation of the new burner and fan equipment, as well as the SA piping and components, does not require any special tests or experiments. No new technologies are being introduced. Testing is performed per required Codes and Standards. The Auxiliary Steam system, the Service Air system and the Auxiliary Boilers are non-safety related and are not required to operate during or following design basis accidents or malfunctions, nor are they required for the mitigation of any accident or malfunctions of any type important to safety. Failure or degradation of the SA system will not degrade the pressure of the Instrument Air (IA) system. This change does not increase the probability or consequences of accidents or malfunctions of equipment previously evaluated, does not introduce a different type of accident or malfunction of equipment, and does not reduce any margin of safety. Therefore, the change does not involve an unreviewed safety question.

Title: ESR 99-00010, Motor Operated Valve (MOV) Modification - 1MS-70 & 1MS-72

Description:

The activity evaluated are several design changes to the actuators for valves 1MS-70 and 1MS-72. These valves open to allow main steam flow to the turbine driven auxiliary feedwater pump (TDAFWP). Additionally, the valves close to isolate a faulted steam generator and for containment isolation. The changes include; 1) overall actuator gear ratio is changed from 52.2:1 to 109:1 which increases the available closing and opening torque to 508 foot-pounds which is more than adequate to satisfy the required opening torque of 323 foot pounds; 2) replaces the worm and worm gears; 3) makes wiring changes to eliminate the valve stroke time from the initiation of permissive to provide power to the hydramotors for 1AF-129, 1AF-130, and 1AF-131; 4) makes wiring changes to provide full stroke bypass around the open torque switch to ensure full motor capability will be available to open the valve under all circumstance; 5) performs static and dynamic testing to determine valve parameters; and 6) replaces the thermal overload relay for 1MS-70 as a result of the overall gear ratio change.

Safety Summary:

The occurrence of any of the analyzed events in Chapter 15 which require AFW system actuation are not increased by these design changes. The overall valve ratio change will ensure the valves 1MS-70 and 1MS-72 are able to open when required for accident mitigation. The gear ratio change results in a longer opening time for the valve. However, sufficient valve travel occurs to allow the steam flow to the AFW turbine to ensure the required AFW flow is met. Bypassing the open torque switch during the open stroke assures full motor capability is available to open the valve under all circumstances. The changes do not alter the function of the valve, which is to supply steam to the AFW turbine and serve as a containment isolation valve. These changes do not increase the probability or consequences of accidents or malfunctions of equipment previously evaluated, do not introduce a different type of accident or malfunction of equipment, and do not reduce any margin of safety. Therefore, the changes do not involve an unreviewed safety question.

Title: ESR 99-00198 Rev. 1, ETA Addition Skid - RFO Tie-Ins

Description:

The proposed activity will add connections for amine injection points to the Heater Drain System for future pH control. The ethanolamine (ETA) temporary feed skid in the Turbine building will provide pH control for the Feedwater and Condensate Systems until implementation of ESR 96-00296. ESR 96-00296 will convert the existing ammonia supply and feed system into the permanent amine (ETA) addition system for the secondary plant and will complete the supply to the Heater Drain system injection points. This activity, ESR 99-00198, adds 4 new connections for chemical feed to the Heater Drain System for future pH control

Safety Summary:

The addition of amine injection points to the Heater Drain System have been developed in accordance with applicable system design, material and construction requirements. The Heater Drain and Steam Generator Chemical Addition systems affected by the proposed changes are not required for the initiation of any engineered safety systems, safe shutdown, or other safety related systems required to mitigate the consequences of an accident. This change does not increase the probability or consequences of accidents or malfunctions of equipment previously evaluated, does not introduce a different type of accident or malfunction of equipment, and does not reduce any margin of safety. Therefore, the change does not involve an unreviewed safety question.

Title: ESR 97-00531, Emergency Service Water (ESW) Header Draining Improvements

Description:

ESR 97-00531 provides drain lines on the Train "A" and "B", supply and return headers in the Service Water Pipe Tunnel. This physically includes adding four - 4" diameter valves and associated pipe fittings and hardware to existing ESW piping.

Safety Summary:

The proposed activity does not change any input parameters of any accident previously analyzed. The changes to the ESW system do not affect system performance. The drain lines are capable of maintaining pressure boundary. This modification does not affect the ESW system capability to remove essential heat loads during emergency operations. These changes do not increase the probability or consequences of accidents or malfunctions of equipment previously evaluated, do not introduce a different type of accident or malfunction of equipment, and do not reduce any margin of safety. Therefore, the changes do not involve an unreviewed safety question.

Title: ESR 98-00121, Modification to Pressurizer Power Operated Relief Valve (PORV) Block Valves

Description:

ESR 99-00121 makes changes to pressurizer PORV block valves 1RC-113, 1RC-115, and 1RC-117. The overall actuator ratio (OAR) is being increased by changing the motor pinion gear and wormshaft gear in each actuator. As a result, the valves' stroke time is changed. The new limiting stroke time is 17 seconds, which is 7 seconds longer than the previous limiting value.

Safety Summary:

The only accident in which the pressurizer PORVs are used is the steam generator tube rupture. In this accident scenario, the pressurizer PORVs lower RCS pressure to stop the primary-to-secondary leakage. Increasing the stroke time of the associated block valves does not have an effect on the accident since the block valves are normally open, which is their required position for this accident. No new failure modes are introduced and the change is within the design limits of the valves and actuators. Therefore, these changes do not increase the probability or consequences of accidents or malfunctions of equipment previously evaluated, do not introduce a different type of accident or malfunction of equipment, and do not reduce any margin of safety. Therefore, the changes do not involve an unreviewed safety question.

Title: ESR 99-00017, Feedwater Regulating Valves - Trim and Actuator Replacement

Description:

The activity evaluated is the replacement of the trim and actuators on the main feedwater regulating valves (1FW-133, 1FW-191 and 1FW-249). The existing trim is replaced with new stack disc type trim and the existing actuators (AOV spring-to-close) are replaced with pneumatic actuators (air to open or close).

Safety Summary:

The modification changes the trim and actuators on the feedwater regulating valves to eliminate sever erosion of the valve bodies and to improve the control characteristics for the valves. The modification does not change the controls for the valves. The valve stroke speed is nether increased nor decreased from the original design. The changes do not impact any other equipment. An air accumulator is added as a subcomponent of the valve actuator. A pair of check valves are used to ensure the air accumulators do not loose their air supply required to close the valve. The actuators and subcomponents are designed, purchased and installed as Quality Class A to ensure their reliability. This modification does not increase the probability or consequences of accidents or malfunctions of equipment previously evaluated, does not introduce a different type of accident or malfunction of equipment, and does not reduce any margin of safety. Therefore, the change does not involve an unreviewed safety question.

Title: ESR 99-00008, Increase Available Torque/Thrust Margin For Valves 1RH-25, 1RH-63, and 1SI-359

Description:

The purpose of ESR 99-00008 is a design change which increases the available torque/thrust margin for the Residual Heat Removal System valves 1RH-25, 1RH-63, and Safety Injection System valve 1SI-359. This is necessary to meet the design requirements of Calculation # RH-0016, Calculation # RH-0017, and Calculation # SI-0023 respectively

For 1RH-25 and 1RH-63 the design change (1) changes the overall actuator gear ratio to 55.8:1 and (2) revises the control wiring to provide full stroke bypass around the open torque switch. The new gear ratio results in a calculated opening time of 21.6 seconds.

For 1SI-359 the design change will change the overall actuator gear ratio to 82.5:1. The new gear ratio increases the stroke time from 11.1 seconds to 19.6 seconds. This gate valve will be at 55% stroke in 11.1 seconds and the valve Cv will be 30% at this point.

A revision to FSAR Table 6.3.2-1 is required to indicate the new stroke times for 1RH-25, 1RH-63, and 1SI-359. The revision will indicate the maximum stroke time for valves 1RH-25 and 1RH-63 based on Calculation CT-30 and valve 1SI-359 based on an appropriate margin above the calculated stroke time. The appropriate margin was obtained by applying the same ratio the stroke time increased to the existing stroke time given in the FSAR and rounding this to the nearest whole unit.

Note (b) of the FSAR Table 6.3.2-1 indicates it applies to the 3" and 4" valves. 1RH-25, 1RH-63, and 1SI-359 are 8" and 10" valves but are included in note (b). FSAR Amendment 21 added the note. A review of the Westinghouse letter FCQL-318 dated January 3, 1985 confirms the note (b) included the 8" valve sizes. The FSAR update associated with ESR 99-00008 will include placement of note (b) as applicable to the 6" to 12" valve sizes also.

Safety Summary:

For 1RH-25 and 1RH-63 the new gear ratio results in a calculated opening time of 21.6 seconds. The FSAR Table 6.3.2-1 identifies the opening time as less than or equal to 15 seconds which is supported by calculation CT-30. During a Large Break LOCA, these valves must open to supply the HHSI pumps with suction source when shifting to the recirculation mode. Calculation CT-30 determines the RWST water volume necessary for switchover to post LOCA recirculation. Calculation CT-30 (revised) shows the stroke time is limited to 30 seconds without resulting in increasing the calculated switchover volume. This change does not degrade nuclear safety since these 8 inch gate valves are expected to supply the entire HHSI suction flow by the time the valve is 20% open. This is based on typical gate valve Cv characteristics, the relatively large size of these valves

with respect to the 500 gpm per pump HHSI flow rate, and the expected high supply pressure from the RHR system (approximately 100 psi above the RWST supply pressure). The approximate full open Cv for an 8 inch gate valve is 5300. For the gate valve, 20% open corresponds to approximately 7% of full Cv. From the accepted formula for valve capacity, the corresponding pressure drop for the valve is 2 psi. With approximately 100 psi of extra available suction pressure, the 2 psi valve dp is insignificant. With a full stroke time of 21.6 seconds, the valve will be at 20% open and fully satisfying their safety function in 4.4 seconds. This is about one half the previous actual stroke time. Therefore lengthening the stroke time by actuator gearing changes does not degrade safety. Overall safety is enhanced by providing greater actuator opening margin.

For ISI-359 the design change increases the stroke time from 11.1 seconds to 19.6 seconds. This will not affect the valves ability to perform its function to open or close for recirculation needs. The valve is required to be open 6.5 hours following a Large Break LOCA to establish hot leg recirculation flow to the core to preclude boron precipitation. Opening of the valve is not required to be rapid. Thus the additional calculated 8.5 seconds of stroke time is not critical. This gate valve will be at 55% stroke in 11.1 seconds and the valve Cv will be 30% at this point.

The proposed design changes do not create any new accidents requiring evaluation. The proposed design changes will not increase the probability of occurrence of any analyzed accident nor will the proposed design changes increase the consequences of any analyzed accidents. The proposed design changes do not increase the probability of occurrence of equipment malfunction previously evaluated nor do the proposed design changes increase the consequences of equipment malfunction that have been previously evaluated. The margin of safety is not reduced by the proposed design changes. Therefore, the change does not involve an unreviewed safety question.

Title: APP-ALB-014 Revision 9, Main Control Board**Description:**

The activity evaluated is a revision to alarm response procedure APP-ALB-014, to allow up to 48 hours of 100% power operation between steam generator eddy (SG) current inspections of the preheater section of the applicable steam generator. Eddy current inspections are performed during each refueling outage. Revision 8 of APP-ALB-014 requires that flow be reduced (i.e., power reduced) to clear a SG A, B, C Main Nozzle High Flow alarm. The alarm indicates that flow through the main feed nozzle to the SG preheater is exceeding the design value for normal operation. The proposed revision to APP-ALB-014 will allow for higher flow to the SG preheater section for a limited duration to permit preheater bypass system or component restoration while limiting power excursions in response to the alarm.

Safety Summary:

Operation at full power with full flow through the preheater for 48 hours per operating cycle will not increase preheater tube wear to the extent that tube integrity is jeopardized. The accident of concern is a steam generator tube rupture. Tube rupture due to wear is bounded by rupture analyses since wear is a leak before break degradation mechanism and on-line primary-to-secondary leakage monitoring activities are in place. Some amount of tube wear is expected in the region of the steam generator under normal operating conditions. Normal inservice inspection requirements for tube inspection and repair adequately address the maintenance of tube integrity margin for wear degradation. This change does not increase the probability or consequences of accidents or malfunctions of equipment previously evaluated, does not introduce a different type of accident or malfunction of equipment, and does not reduce any margin of safety. Therefore, the change does not involve an unreviewed safety question.

Title: ESR 95-00903, In-Processing Building Renovation

Description:

The activity evaluated is the Fire Protection & Detection (FP&D) System changes associated with renovation of the Stores Receiving Building to the site's In-Processing Building. The FP&D Systems were modified because the function of the building was revised from material handling and storage to that of being manned by administrative personnel providing services for in-processing and training of site employees/contractors.

Safety Summary:

Although the FP&D Systems have been modified for the function of the In-Processing Building, the site's Fire Protection/Detection Program is not affected. Installation, fabrication, and testing of these systems are governed by the National Fire Protection Association (NFPA) Code. All materials used are also controlled by the NFPA Code. The changes being made to the FP&D System are being implemented in a building outside the Protected Area that is not within the confines of a site event. This change does not increase the probability or consequences of accidents or malfunctions of equipment previously evaluated, does not introduce a different type of accident or malfunction of equipment, and does not reduce any margin of safety. Therefore, the change does not involve an unreviewed safety question.

Title: ESR 97-00315, Main Feedwater Isolation Valve Stroke Evaluation

Description:

The activity is an engineering evaluation to determine the number of times the main feedwater isolation valves (MFIV) may require stroking to place the plant in a safe condition following a design basis accident. The ESR demonstrates that a MFIV with a two (2) stroke capability will permit the plant to be placed in a safe condition following design basis accidents as evaluated in Chapter 15 of the FSAR.

Safety Summary:

This ESR is an engineering evaluation only and does not change any plant structures, systems, components or procedures. It determines the number of times the main feedwater isolation valves (MFIV) may require stroking to place the plant in a safe condition following a design basis accident. Considerations within this evaluation do not change, degrade or prevent actions described or assumed in a design basis accident. The evaluation alters no fission product barriers and impacts no radiological consequences of design basis accidents. The purpose of the evaluation is to evaluate the functional requirements of the MFIVs following a design basis accident. The ESR demonstrates that a MFIV with a two (2) stroke capability will permit the plant to be placed in a safe condition following design basis accidents as evaluated in Chapter 15 of the FSAR. This change does not increase the probability or consequences of accidents or malfunctions of equipment previously evaluated, does not introduce a different type of accident or malfunction of equipment, and does not reduce any margin of safety. Therefore, the change does not involve an unreviewed safety question.

Title: ESR 99-00360, Replacement of Fire Protection Check Valves

Description:

Check valves 3FP-432 and 3FP-8, located just downstream of the Fire Protection Jockey Pump, are being replaced. The new valves are stainless steel whereas the original valves were carbon steel.

Safety Summary:

There will be no change to the function of the Fire Protection System. The replacement valves will function the same as the original valves. The Fire Protection System will continue to be able to perform its non-safety design function and the consequences of failure of all safety related components will remain the same. This activity does not affect the ability to achieve and maintain safe shutdown in the event of a fire. This change does not increase the probability or consequences of accidents or malfunctions of equipment previously evaluated, does not introduce a different type of accident or malfunction of equipment, and does not reduce any margin of safety. Therefore, the change does not involve an unreviewed safety question.

Title: ESR 99-00045, Air Duct Deflector for "C" Main Feedwater Isolation Valve

Description:

The activity evaluated is the addition of an insulation blanket for the hydraulic fluid reservoir on the "C" Main Feedwater Isolation Valve (MFIV), 1FW-217. The insulation blanket is provided to maintain the fluid temperature at 60 degrees F, or above. The use of insulation will reduce the operator actions required by OST-1021, which is used to assure that the MFIV actuator temperature is within the established limits

Safety Summary:

The added insulation will help to assure that the MFIV will be able to perform its safety function. The insulation is similar to other removable insulation and is also passive in that it has no safety function to perform. The valve actuator will continue to function as required. There is no credible mechanism by which the insulation could threaten any fission product barriers, either directly, or by creating an interruption or decrease in heat removal. This change does not increase the probability or consequences of accidents or malfunctions of equipment previously evaluated, does not introduce a different type of accident or malfunction of equipment, and does not reduce any margin of safety. Therefore, the change does not involve an unreviewed safety question.

Title: RAF #2672, FSAR Section 7.1.2, 7.2.2, and 7.3.2 Changes

Description:

The changes evaluated are proposed revisions to Sections 7.1.2.18, 7.3.2.2.10.1, and 7.2.2.2.3.10.c.2. The changes to Sections 7.1.2.18, 7.3.2.2.10.1 are administrative and only provide updates and corrections to reference numbers. The proposed revision to Section 7.2.2.2.3.10.c.2 revises the procedure for restoring from RPS logic testing as presently described in the FSAR. This section currently states that at the completion of RPS logic matrix testing, one bistable in each channel of process instrumentation or nuclear instrumentation is tripped to check closure of the input error inhibit switch contacts. This check can alternatively be performed by verifying that a normally tripped condition at high power (e.g., Power Range Low Power High Flux bistables) is present on each input channel. This alternative method eliminates the need to trip each of the input channels and the risk of an inadvertent reactor trip or ESFAS actuation if a human error is made and an incorrect bistable is tripped. The alternative method of verification of currently tripped bistables accomplishes the same result without the risk of an inadvertent trip or actuation. This alternate test verification does not create a special test or experiment because it only verifies restoration of the input error inhibit switch contacts by observing normal plant indications.

Safety Summary:

The changes to Sections 7.1.2.18, 7.3.2.2.10.1 are administrative and only provide updates and corrections to reference numbers. With regard to the revision to Section 7.2.2.2.3.10.c.2, the alternative method of verification of currently tripped bistables accomplishes the same result without the risk of an inadvertent trip or actuation. This alternate test verifies restoration of the input error inhibit switch contacts by observing normal plant indications. This change will not increase the probability or consequences of accidents or malfunctions of equipment previously evaluated, will not introduce a different type of accident or malfunction of equipment, and will not reduce any margin of safety. Therefore, the change does not involve an unreviewed safety question.

Title: Nitrogen System and Carbon Dioxide System Drawing Corrections**Description:**

The activity evaluated is an administrative revision to flow diagrams to show the correct location of Nitrogen System isolation valve 3NI-322 and pressure instruments PI-8010 and PS-8010. The subject flow diagrams presently show the valve and instruments in the Reactor Auxiliary Building when they are physically located south of the Turbine Building. The instruments are also incorrectly shown downstream of the nitrogen supply take-off to the Waste Processing Building when they are physically located upstream of this take-off.

Additionally, these flow diagrams show Carbon Dioxide System pressure instrument PS-8040 which has been spared. The flow diagrams are being updated to show the instrument removed and the root valve in the shut position and plugged to agree with current design and operating procedures.

Safety Summary:

This change makes corrections to plant drawings to depict the approved design and operation of the affected systems. There are no physical changes being made to the plant by this activity. This activity will not impact the Nitrogen System or Carbon Dioxide System function, performance or reliability. The original design parameters such as nitrogen and carbon dioxide systems temperatures, pressures and configuration will all remain the same. Both systems are non-safety, non-seismic and non-radioactive. This change does not increase the probability or consequences of accidents or malfunctions of equipment previously evaluated, does not introduce a different type of accident or malfunction of equipment, and does not reduce any margin of safety. Therefore, the change does not involve an unreviewed safety question.

Title: ESR 98-00201, Replacement of EDG Starting Air Compressor Pressure Switches**Description:**

The activity evaluated is the replacement of Emergency Diesel Generator (EDG) Starting Air System United Electric pressure switches, which are obsolete, with new Static-O-Ring pressure switches with a larger pressure range, however the instrument setpoint is not changing. The existing pressure switches adjustable range is 10-100 psi with a setpoint of 100 psi. Based on good I&C practice, and recommendation from the switch manufacturer, the range of the new switch will change to 20-180 psi. This will allow for the switch setpoint to be set at 100 psi without setting it at the end of its range. All other design features have been evaluated to be acceptable or better than the old switches.

Safety Summary:

The redundant physically separated EDG Starting Air System consists of a pressure switch, which starts the system air compressor to supply air to its receiver. The receiver is rated for five cold starting attempts of the EDG. The new pressure switches meet the same quality classification requirements as the existing pressure switches. Any failure modes of the new switches are equivalent to and are bounded by the failure modes of the old pressure switches. This change does not increase the probability or consequences of accidents or malfunctions of equipment previously evaluated, does not introduce a different type of accident or malfunction of equipment, and does not reduce any margin of safety. Therefore, the change does not involve an unreviewed safety question.

Title: ESR 99-00378, Temporary Modification to "C" Reactor Coolant Pump Standpipe Level Indication

Description:

The activity evaluated is a temporary modification which will remove field input to annunciators ALB-8/5-5A (RCP-C standpipe high level) and 5-5B (RCP-C standpipe low level) on the Main Control Board (MCB). Both alarms were received simultaneously and are currently locked-in on the MCB. The alarms have been determined as false indication. Alarm input to these annunciators will be temporarily removed by lifting the field cable inputs and reconfiguring the alarm input card to normally open operation until field repairs can be performed. Removal of the alarm indication will reduce operator distraction and possible masking of other alarms.

Safety Summary:

Currently both alarms are locked in due to circuitry or level switch malfunction. Removing the alarm indication will reduce operator distraction. Operations have verified that RCP-C standpipe actual level was not abnormal. Operators are performing a manual fill operation approximately once every 12 hours based on an evaluation performed by ESR 96-00238. Manual fill operations will prevent a loss of RCP-C standpipe level. Therefore, disabling the faulty alarm inputs until repairs can be made will not increase the probability or consequences of accidents or malfunctions of equipment previously evaluated, does not introduce a different type of accident or malfunction of equipment, and does not reduce any margin of safety. Therefore, the change does not involve an unreviewed safety question.

Title: ESR 95-00695, Potable Water System Drawing Update

Description:

The purpose of ESR 95-00695 is to update the Potable Water System (PWS) flow diagrams and FSAR Figure 9.2.4-1 to reflect existing eyewash stations and associated isolation valves the Reactor Auxiliary Building (RAB). This ESR will also cleanup existing flags and temporary caps on the flow diagrams that are no longer installed in the field or go to structures that no longer exist.

Safety Summary:

This ESR makes no physical changes to the PWS. The PWS diagrams will be updated to reflect existing design that is currently shown on the plumbing and drainage riser diagrams. The addition of the stations to the simplified flow diagrams will allow the isolation valves to be tagged and included in operating procedures for future PWS clearances. The PWS is a non-nuclear safety related system and is not required to support any equipment required for safety as evaluated in the SAR. Therefore, these changes do not increase the probability or consequences of accidents or malfunctions of equipment previously evaluated, do not introduce a different type of accident or malfunction of equipment, and do not reduce any margin of safety. Therefore, the changes do not involve an unreviewed safety question.

Title: Reassign Assessment Organizations for Corporate Support**Description:**

The activity evaluated is a change to Performance Evaluation Support's (PES) responsibility for assessing the quality related activities of the corporate support organizations. This revision also provides responsibility for PES to ensure their Appendix B assessment activity is independently assessed to ensure PES independence and meet the requirement to independently assess the audit program.

Safety Summary:

The committed assessments are unchanged as a result of this revision. Corporate support organizations, previously included in NAS plant assessments, will now be assessed separately by PES. This change will maintain independent oversight of the assessment organizations. Independent oversight of plant NAS is not affected. PES oversight will be provided by appropriately trained and qualified individuals. The change does not effect the scope or standards of the QAPD as described in FSAR Section 17.3. Additionally, compliance with FSAR 1.8 commitments to Regulatory Guide 1.33, 1.144, and 1.146 and associated ANSI standards is maintained. Based on the above, the revision in the QA program is determined to be a change in commitment but does not reduce the commitment made and approved by the NRC in the implementation of the QA program. This change does not increase the probability or consequences of accidents or malfunctions of equipment previously evaluated, does not introduce a different type of accident or malfunction of equipment, and does not reduce any margin of safety. Therefore, the change does not involve an unreviewed safety question.

Title: Spent Fuel Pool Makeup Line Classification

Description:

The activity evaluated is a change to FSAR Table 3.2.1-1 to accurately reflect the classification of the makeup line from the Refueling Water Storage Tank (RWST) to the spent fuel pools. Table 3.2.1-1 currently indicates this line as safety related and seismic, constructed to ASME Section III, Class 3. The line is actually non-safety, non-seismic, and constructed to ANSI B31.1. This revision corrects a discrepancy in the FSAR, and is completely consistent with the design/licensing bases and operation of the Harris Plant.

Safety Summary:

This change corrects a discrepancy in FSAR Table 3.2.1-1 to make the document consistent with discussion in FSAR Section 9.1, NUREG-1038, design drawings and calculations, and plant operating procedures. Relative to core and spent fuel pool cooling, the mitigative strategies and capabilities to which the Harris Plant was licensed remains intact. Consistent with the discussion in the FSAR and SER, Emergency Service Water will continue to be available in the event the RWST and other spent fuel pool makeup sources are not available. This change does not increase the probability or consequences of accidents or malfunctions of equipment previously evaluated, does not introduce a different type of accident or malfunction of equipment, and does not reduce any margin of safety. Therefore, the change does not involve an unreviewed safety question.

Title: ESR 99-00154, Resolve Smart Net Y2K Issues

Description:

The activity evaluated is the installation of new non-safety related instrumentation with improved accuracy for the performance of the daily power calorimetric and the once-per-cycle RCS flow calorimetric. The activity removes existing, non-permanent plant instrumentation, which is currently used to perform these tasks.

Safety Summary:

The activity installs non-safety related instrumentation for accurately monitoring Feedwater System process temperature and flow parameters in support of plant performance monitoring tests. This instrumentation does not directly interface with any safety related system or provide any safety related function. The new instrumentation will be periodically calibrated in a traceable manner to ensure that Technical Specification bounding accuracy requirements are continuously being met. In this manner, accurate data for use in the Power and RCS Flow Calorimetrics will be collected. This change does not increase the probability or consequences of accidents or malfunctions of equipment previously evaluated, does not introduce a different type of accident or malfunction of equipment, and does not reduce any margin of safety. Therefore, the change does not involve an unreviewed safety question.

Title: OST-1827 Revision 4, Emergency Diesel Generators Simultaneous Start
10-Year Interval Modes 5 and 6

Description:

Procedure OST-1827 Revision 4, performs a simultaneous fast start of both Emergency Diesel Generators (EDGs). This OST satisfies Technical Specification surveillance 4.8.1.1.2.g; i.e. with the plant in a shutdown condition, both EDGs are started simultaneously, and accelerate to at least 450 RPM in less than or equal to 10 seconds. The purpose of this surveillance is to identify potential common-mode failures that may go undetected in single EDG unit tests.

Safety Summary:

This OST performs a start of both EDGs using operating procedure OP-155 guidance. The soft-start feature is defeated on both EDGs. This does not impact EDG operability. In the event a valid emergency start signal is received during performance of this test (with the exception of during diesel barring), both EDGs will be immediately available to perform their emergency function. Adequate guidance is given within the procedure to assure only one EDG is barred at a time, thus at least one EDG is maintained operable at all times. Neither EDG is paralleled to the grid during this OST, so there is no common risk to the diesels associated with running in parallel with the offsite power source. This change does not increase the probability or consequences of accidents or malfunctions of equipment previously evaluated, does not introduce a different type of accident or malfunction of equipment, and does not reduce any margin of safety. Therefore, the change does not involve an unreviewed safety question.

Title: ESR 99-00372, Remove Door D0603

Description:

ESR 99-00372 removes plant door D0603 which is located in the Hot Machine Shop, Reactor Auxiliary Building , Elevation 236' and leads to room T125. The door is being removed due to the potential for personnel getting locked in room T125 without a way out. Evaluation has determined that door D0603 has no purpose except providing access to door D0783 which secures a radiation storage area. Removal of this door will require revision to several FSAR figures.

Safety Summary:

Door D0603 is located in the Hot Machine Shop where there is no equipment important to safety located. Door D0603 provides no safety function nor is it in support of any equipment important to safety. The door being installed or removed has no effect on any accident analysis or fire analysis in support of safe operation of the plant. Therefore, this change does not increase the probability or consequences of accidents or malfunctions of equipment previously evaluated, does not introduce a different type of accident or malfunction of equipment, and does not reduce any margin of safety. Therefore, the change does not involve an unreviewed safety question.

Title: ESR 96-00357, Transfer CCS Instrument List and Setpoint Document to EDBS

Description:

ESR 96-00357 documents the transfer of Instrument and Setpoint information from the plant's CCSO data base, which is not Y2K compliant, into EDBS (Equipment Database System) . The change to the SAR consists of removing the Setpoint Document number, CAR-2166-B-508, from the FSAR.

Safety Summary:

This change is administrative in nature. A validation of the transferred data was performed. The transfer was necessary to assure Y2K compliance for the HNP Instrument and Setpoint data. No plant SSCs are affected by this change. This change does not increase the probability or consequences of accidents or malfunctions of equipment previously evaluated, does not introduce a different type of accident or malfunction of equipment, and does not reduce any margin of safety. Therefore, the change does not involve an unreviewed safety question.

Title: Testing Frequency Change for Extraction Steam Non-return Valves

Description:

This FSAR change modifies the testing frequency of the extraction steam non-return valves. Previously, the non-return valves were tested on a monthly basis. The change to the FSAR would require non-return valves to be tested weekly for the four weeks following a turbine outage and quarterly thereafter.

Safety Summary:

The change to the periodicity of testing non-return valves is acceptable based on the non-return valves not providing any initiating or mitigating functions for any accident or malfunction described in the FSAR. The change in testing frequency is warranted based on the success performing the previous tests. These valves are not safety related and are not required by Technical Specifications. Therefore, this change does not increase the probability or consequences of analyzed accidents, nor introduce a different type of accident or equipment malfunction. The proposed change does not decrease the margin of safety as described in the Technical Specifications. Therefore, no unreviewed safety question exists.

Title: Clarification of Operator Actions

Description:

FSAR section 15.1.5 describes the response of the plant to a Main Steam Line Break (MSLB) event. This implementing activity is a change to this FSAR section to more accurately describe the operator actions to the event by eliminating reference to a specific time requirement for taking control of pressurizer level. No time requirement is modeled in the actual safety analysis.

Safety Summary:

The proposed changes to FSAR 15.1.5 do not change the requirements for operator action associated with a MSLB event. This change will not impact the sequence of events or the release paths of the design basis event. The purpose of this change is to clarify operator actions and eliminate unnecessary specifics from the FSAR. Therefore, this change does not increase the probability or consequences of analyzed accidents, nor introduce a different type of accident or equipment malfunction. The proposed change does not decrease the margin of safety as described in the Technical Specifications. Therefore, no unreviewed safety question exists.

Title: Administrative Drawing Revision – Condensate System Spared Pressure Differential Switches

Description:

Prior to initial plant startup, a Field Change Request (FCR-I-3152) spared pressure differential switches PDS-2305-A&B. PDS-2305-A&B were installed for pressure differential across a startup strainer and after initial startup and testing the instruments were spared. The flow diagrams were not updated. The activity evaluated is the update of the drawings to show the instruments spared and their isolation valves closed.

Safety Summary:

Instruments PDS-2305-A&B serve no purpose after the startup strainers were removed. This administrative change will bring the drawings into agreement with the plant and operating procedures. This change does not increase the probability or consequences of accidents or malfunctions of equipment previously evaluated, does not introduce a different type of accident or malfunction of equipment, and does not reduce any margin of safety. Therefore, the change does not involve an unreviewed safety question.

Title: ESR 99-00216, Removal of "A" Aux. Boiler

Description:

ESR 99-00216 isolated and removed the "A" Aux. Boiler from the site. Both the "A" and "B" Aux. Boilers were shut down in 1997 because of deteriorated tubing in the fire boxes. The "B" Aux. Boiler has since been rebuilt by other work activities. The "A" Aux. Boiler will not be rebuilt. The "A" Aux. Boiler and related support systems are non-nuclear safety-related. Although the Aux. Boilers are not explicitly described in the FSAR, the boilers are mentioned and do appear in some Figures. The removal of "A" Aux. Boiler is considered a change to the facility.

Safety Summary:

ESR 99-00216 permanently removed the "A" Aux. Boiler from the site. The "B" Aux. Boiler is fully functional and capable of providing all necessary steam demands. The Aux. Boilers and the support systems are non-nuclear safety related and are not required to operate during or following design basis accidents. They are not involved in the initiation of any accidents or malfunctions nor the mitigation of any accident or malfunctions of any type important to safety. The Aux. Boilers are briefly mentioned in FSAR section 10.4.3.2 and 9.5.1.18. They appear in FSAR Figures 1.2.2-1, Site Plan, and 1.2.2-2, Plot Plan. They also are referenced in FSAR Figure 9.3.1-1. The only changes necessary to the FSAR are to change the references from plural (boilers) to singular or to remove the rectangle representing the "A" Aux. Boiler from the Site Plan and Plot Plan. No plant SSCs are affected by this change. This change does not increase the probability or consequences of accidents or malfunctions of equipment previously evaluated, does not introduce a different type of accident or malfunction of equipment, and does not reduce any margin of safety. Therefore, the change does not involve an unreviewed safety question.

Title: Centrifugal Charging Pumps

Description:

This change revises FSAR Section 6.3.2.2.5 to clarify the function of the Safety Injection alternate miniflow path,. The FSAR currently states that the alternate miniflow orifice, by itself, prevents the charging pump from reaching a deadhead condition. The FSAR is being revised to clarify that the alternate miniflow path functions to prevent the charging pump from reaching a deadhead condition upon high reactor coolant system pressure, coincident with a Safety Injection. The orifice functions to prevent runout conditions while the alternate miniflow path is open. The FSAR is also being changed to correct the figure reference for the centrifugal charging pump design performance curve.

Safety Summary:

No physical plant changes are being made by this FSAR revision. Although the alternate miniflow orifice was identified in the FSAR as preventing deadhead condition during Safety Injection, the function of the alternate miniflow path is unchanged. Alternate miniflow is not an accident initiator, but is relied upon for accident mitigation purposes. This FSAR revision is a description clarification only, and the Safety Injection path which is used to mitigate an accident is protected. The change to correct the figure reference is administrative in nature. The FSAR revision does not alter the design, function or method of performing the function of a structure, system or component. This change will not increase the probability or consequences of accidents or malfunctions of equipment previously evaluated, will not introduce a different type of accident or malfunction of equipment, and will not reduce any margin of safety. Therefore, the change does not involve an unreviewed safety question.

Title: ESR 98-00259, Reactor Make-Up Water Storage Tank Bladder Weight

Description:

The activity evaluated is the acceptance of maintaining a weight on the Reactor Make-Up Water Storage Tank (RMWST) bladder in order to prevent the bladder from blocking the RMWST relief valves. The ESR addresses potential concerns and determines that the weight will not affect the function of the RMWST or the Primary Make-Up System.

Safety Summary:

The subject weight was installed in 1986 as part of an acceptance test for PCR-248, and has continued to be in the RMWST since that time. However, the weight was never fully incorporated into plant design. No physical work will be done, since the weight will simply remain in place. The weight will not affect RMWST or Primary Make-Up System function, or cause any part of the bladder to tear off and enter the Primary Make-up System where it could be sent into the Reactor Coolant System. This condition does not increase the probability or consequences of accidents or malfunctions of equipment previously evaluated, does not introduce a different type of accident or malfunction of equipment, and does not reduce any margin of safety. Therefore, the condition does not involve an unreviewed safety question.

Title: License Amendment 91, Containment IRLT Option B**Description:**

This change revises FSAR Section 6.2.6, Containment Leakage Testing, to reflect implementation of License Amendment 91 which incorporates the performance-based 10 CFR 50 Appendix J, Option B for Containment Integrated Leakage Rate Testing (ILRT). The FSAR changes delete the specific value of 41.0 psig for the calculated containment peak pressure, P_a , which is now defined in the Technical Specifications (TS), updates a reference to an ANSI/ANS standard, and deletes some extraneous discussion of ILRT testing corrective actions and test frequencies, which are specified in the TS.

Safety Summary:

The changes to FSAR Section 6.2.6 are administrative in nature, and do not alter the intent of containment leakage testing activities. Changes to the TS were approved by the NRC through the issuance of License Amendment 91. The FSAR changes simply clarify testing requirements and references to reflect the approved TS changes. The FSAR revision does not alter the design, function or method of performing the function of structure, system or component described in the SAR. This change will not increase the probability or consequences of accidents or malfunctions of equipment previously evaluated, will not introduce a different type of accident or malfunction of equipment, and will not reduce any margin of safety. Therefore, the change does not involve an unreviewed safety question.

Title: ESR 99-00433, Use of Cooling Tower Basin as Backup Fire Protection Water Source

Description:

The activity evaluated is the use of the Cooling Tower Basin as a backup source for Fire Protection System water. This backup source would be used when one of the normal fire pumps at the Emergency Service Water Intake Screening Structure is out of service for more than 7 days. The Cooling Tower Basin would be used to supply water to backup pump(s) that would supply at least 2,500 gpm at 125 psi, to the Fire Protection System underground loop through fire hydrants in the vicinity of the Cooling Tower Basin.

Safety Summary:

Based on the evaluation of the Fire Protection System water requirements and the water available in the Cooling Tower Basin, the Cooling Tower Basin can provide an acceptable backup supply to Fire Protection System water. The evaluation has also shown that using the Cooling Tower water as a backup to the fire water supply will not pose an unacceptable loss of basin volume for use during its normal functions. The chemical makeup of the Cooling Tower water is such that it would not cause any adverse reaction to any SCCs that may be sprayed by the fire suppression systems that contain water drafted from the Cooling Tower Basin. This change does not increase the probability or consequences of accidents or malfunctions of equipment previously evaluated, does not introduce a different type of accident or malfunction of equipment, and does not reduce any margin of safety. Therefore, the change does not involve an unreviewed safety question.

Title: Sound Powered Phones - FSAR Description Clarification**Description:**

The activity evaluated is a clarification to the description contained in the FSAR regarding the Harris Plant's Sound Powered Phone System. The description clarifies that although the system is a five channel system, two channels (Channels 1 & 2) receive increased maintenance over the other three channels to ensure reliability and availability for safe shutdown and emergency operating procedure communications.

Safety Summary:

The Sound Powered Phone System is non-safety related and independent of all other installed plant systems. The change to the FSAR will define the channels used during plant emergency operating procedures and the resulting increased maintenance. The increased maintenance given to these two channels increases the reliability and availability for safe shutdown and emergency operating procedure communications and does not increase the probability or consequences of accidents or malfunctions of equipment previously evaluated, does not introduce a different type of accident or malfunction of equipment, and does not reduce any margin of safety. Therefore, the change does not involve an unreviewed safety question.

Title: ESR 9900093, Reactor Vessel Surveillance Capsule "X" Results Implementation

Description:

The activity evaluated is the update of Technical Specifications, FSAR, plant procedures, and engineering design documents to incorporate new reactor vessel pressure-temperature limits, heatup and cooldown rate limits, and LTOPS setpoints, based on analysis of reactor vessel surveillance capsule "X" withdrawn during RFO 8.

Safety Summary:

The analysis results for reactor vessel surveillance capsule "X" have been evaluated and based on these evaluations, new pressure-temperature (P-T) limits applicable up to 36 EFPY were chosen to replace the existing 11 EFPY limits. The P-T limits were calculated using Code Case N-640. The changes affect operation of the RCS components when the temperature is below 350°F. The revisions to P-T limits and allowable heatup and cooldown rate limits are consistent with ASME code case which has been authorized for other licensees by the NRC. The change modifies the setpoint of the pressurizer PORVs for LTOPS. Changes to the LTOPS setpoints applicable below 350°F effectively increase the allowable operating pressure for any given temperature during shutdown. These changes do not result in conditions that are outside of the design basis for RCS SSCs. The changes do not alter the characteristics of the RCS SSCs adversely, and therefore do not impact the performance of the RCS SSCs during power operations. The changes do not affect core reactivity or fuel handling SSCs, and do not result in conditions that alter the performance of the CVCS during shutdown conditions. These changes do not increase the probability or consequences of accidents or malfunctions of equipment previously evaluated, do not introduce a different type of accident or malfunction of equipment, and do not reduce any margin of safety. Therefore, these changes do not involve an unreviewed safety question.

Title: OST-1826 Revision 13, Safety Injection: ESF Response Time, Train B 18 Month Interval on a Staggered Test Basis Mode 5-6

Description:

OST-1826 performs B Train response time testing for Safety Injection (SI), Containment Phase A Isolation, Auxiliary Feedwater (AFW), Emergency Service Water (ESW), and Containment Fan Cooler components. Also, one or both Emergency Diesel Generators (EDGs) are optionally started on an SI signal, and start times are recorded. In addition to collection of ESF response times, OST-1826 performs an operational test of the majority of the components associated with the previously mentioned safeguards actuation signals and functions, as well as selected components associated with Feed Water isolation, Control Room Isolation, and Containment Ventilation Isolation signals.

This test necessarily renders a number of components inoperable during preparation and performance of the test. This is required to: a) protect the plant from undesirable transients associated with the various safeguards actuation signals, and b) to isolate parallel or redundant signal paths for components that may receive signals from multiple sources, to verify operability of the signal paths being tested. This is acceptable, since the procedure is performed in Modes 5 or 6, when the associated safeguard functions are not required to be operable.

One of the more notable instances in which safeguards signals are defeated involves the EDGs, wherein, if it is desired that one or more EDG not be started during the OST (for example, to eliminate the need to render the only operable EDG inoperable for pre-run barring), the SI inputs to the EDG may be defeated to prevent auto-start upon actuation of SI. This is acceptable, from the standpoint of preserving EDG operability, since the SI function itself is not required in Modes 5 and 6.

Safety Summary:

Equipment setup and alignment associated with this procedure does not introduce any known failure modes not already evaluated in the SAR. The test method applied within the procedure is consistent with established safeguards testing practices. Operability requirements for all equipment required for accident mitigation in the operating modes in which this test can be run are maintained. The plant configuration is maintained within the operational bands specified in the various system operating procedures. With regard to inventory related accidents, RCS inventory is maintained stable by isolating the high-head SI injection line prior to actuation of SI; and by minimizing RCP seal injection flows. As far as radiological accidents are concerned, Containment Ventilation Isolation and the various building Emergency Exhaust features are maintained intact throughout this test. In addition, prerequisites to the procedure require that no fuel movement be underway during the test. While the Boron Injection Tank is isolated from the RCS, emergency boration capability remains available via the other three high-head injection lines as well as through the charging line. These changes do not increase the probability

or consequences of accidents or malfunctions of equipment previously evaluated, do not introduce a different type of accident or malfunction of equipment, and do not reduce any margin of safety. Therefore, these changes do not involve an unreviewed safety question.

Title: ESR 99-00450, Increase Motivating Air to Condenser Vacuum Pump

Description:

This modification adds inlet filters to 1AE-29 and 1AE-46 to allow additional motivating air to the Condenser Vacuum Pumps during hot weather. The additional air allows the pumps to operate at a lower temperature. It also adds a position indicator on 1AE-29. The ESR adds the clarification to the flow diagram that the suction strainers for the Condenser Vacuum pumps are temporary strainers and corrects the valve drawing for 1AE-29, 1AE-30, 1AE-31, and 1AE-32.

Safety Summary:

The addition of the inlet filters allows additional air to be supplied to the Condenser Vacuum pumps. This allows the pumps to operate cooler. This decreases the probability of the pumps tripping off due to high temperature. The filters are constructed with the same size openings as the existing motivating air filter and will prevent debris from being sucked into the piping. No other plant equipment is impacted. This activity does not increase the probability or consequences of accidents or malfunctions of equipment previously evaluated, does not introduce a different type of accident or malfunction of equipment, and does not reduce any margin of safety. Therefore, the change does not involve an unreviewed safety question.

Title: Disassembly of Lead Fuel Assembly**Description:**

The activity evaluated is disassembly of the upper nozzle of a lead fuel assembly (LFA) and removal of fuel rods for inspection purposes. This activity is being implemented by procedure FHP-047T. A lead fuel assembly will be placed into a Siemens Power Corporation portable elevator and the top nozzle will be removed. Fuel pins will be removed from the LFA per the procedure so that measurements can be performed using a gamma scan collimator/detector. When the data collection is complete, the fuel pins are replaced, the top nozzle is replaced, and the LFA is moved back to its storage location in the spent fuel pool. Setup of the portable elevator and the gamma scan collimator/detector have been evaluated previously (SE 98-098 and 99-0119), and fuel movement is controlled by a current plant procedure. However, the removal of fuel rods from the LFAs is considered a test not described in the SAR and is therefore being evaluated.

Safety Summary:

The proposed activity involves disassembly of the upper nozzle of a fuel assembly and removal of fuel rods for inspection purposes. The movement of single fuel rods will be controlled by procedure and will be performed by qualified personnel. The maximum number of fuel assemblies that can be placed into the elevator is one; therefore the maximum number of fuel rods that can fail are contained in one assembly. The removal of fuel rods from the fuel assembly would change the geometry, but the analyzed dropped fuel assembly accident would still be the bounding accident. This activity does not increase the probability of dropping a fuel assembly, and the consequences of a dropped assembly have been analyzed and would remain the same as stated in the FSAR. This activity involves the movement of one fuel assembly at a time; there are no other SSCs involved in the movement of the fuel. This activity does not affect equipment important to safety. In summary, these changes do not increase the probability or consequences of accidents or malfunctions of equipment previously evaluated, do not introduce a different type of accident or malfunction of equipment, and do not reduce any margin of safety. Therefore, the proposed activity does not involve an unreviewed safety question.

Title: AP-013 Revision 22, Plant Nuclear Safety Committee

Description:

The activity evaluated is a proposed change to AP-013 which will allow a non-voting member of the HNP's PNSC to be designated as an Acting Chairman. Non-voting members must meet the same qualification and experience requirements as a regular member. An FSAR change is required and will be processed to describe the non-voting member's role on the PNSC and to acknowledge that a non-voting member may be designated in writing by the (Plant General Manager) PGM as an Acting Chairman.

Safety Summary:

Any PNSC non-voting member must meet the same qualification/experience requirements as a regular member. Additionally, any non-voting member, before being designated as an Acting Chairman, must meet the same qualification/experience requirements as the Chairman and any regular member designated as Acting Chairman. Therefore there is no reduction in qualification/experience requirements by allowing a non-voting member of the PNSC to be designated in writing by the PGM as an Acting Chairman. The change to AP-013 is administrative in nature and does not involve any physical changes to plant structures, systems, or components (SSCs) nor does it change the way in which plant SSCs are operated or maintained. Therefore, this change does not increase the probability or consequences of accidents or malfunctions of equipment previously evaluated, does not introduce a different type of accident or malfunction of equipment, and does not reduce any margin of safety. Therefore, the change does not involve an unreviewed safety question.

Title: RAF 2723, Plant Procedures

Description:

The activity evaluated is a proposed change to FSAR Section 13.5, Plant Procedures. The changes are administrative in nature and deal with specific requirements for responsibility, format, and content. The listed details in the FSAR are duplicated in Administrative Procedures and are still required by underlying regulatory documents, i.e. Reg Guide 1.33.

Safety Summary:

Detailed information is removed from FSAR Section 13.5. This change modifies statements in the FSAR and deletes detailed requirements for content and format for different type of procedures listed in the FSAR. These changes allow flexibility in administrative processes without changing the intent and meaning of the requirements from Reg Guide 1.33. The FSAR intent is to be a guiding outline of plant processes and to provide enough detail to set up effective programs and processes in association with Technical Specifications and related regulatory guidance. This change to the FSAR keeps the current outline of the procedure process but places the process details in Administrative procedures. There is no reduction in compliance with the requirements and intent of the FSAR section on procedures. The change to FSAR Section 13.5 is administrative in nature and does not involve any physical changes to plant structures, systems, or components (SSCs) nor does it change the way in which plant SSCs are operated or maintained. Therefore, this change does not increase the probability or consequences of accidents or malfunctions of equipment previously evaluated, does not introduce a different type of accident or malfunction of equipment, and does not reduce any margin of safety. Therefore, the change does not involve an unreviewed safety question.

Title: ESR 00-00013, Connections for Temporary Air Compressors

Description:

The activity evaluated is the addition of two connection points for temporary air compressors for the Compressed Air System. The connection points will be on the Instrument Air Header and the Service Air Header where the original Unit 2 cross-connects were located. The Instrument Air connection point is isolated by an existing valve so equipment using instrument air will not be affected. The connection will be made by cutting the existing cap, welding on a flange, and installing a blind flange with gasket.

Safety Summary:

The Compressed Air System is a non-nuclear safety related, non-seismic system. Operation of the Compressed Air System is not required for the initiation of any engineered safety feature systems, safe shutdown system, or other safety related system. The proposed connections will not affect the way the Instrument Air System operates. This change does not increase the probability or consequences of accidents or malfunctions of equipment previously evaluated, does not introduce a different type of accident or malfunction of equipment, and does not reduce any margin of safety. Therefore, the change does not involve an unreviewed safety question.

Title: FSAR section 1.8 exception to Regulatory Guide 1.118

Description:

Regulatory Guide 1.118 / IEEE Standard 338-1977. IEEE Standard 338-1977, Section 5.7 states "Each test bypass condition utilized at a frequency of more than once a year shall be individually and automatically indicated to the operator in the main control room in such a manner that the bypassing of a protective function is immediately evident and continuously indicated." This Review Approval Form (RAF) adds a section stating that SHNPP takes exception to this requirement during performance of containment ventilation isolation (CVI) from the containment ventilation isolation radiation monitors. The opposite train of CVI from the area radiation monitors is bypassed during CVI radiation monitor testing to ensure that both trains of containment vacuum relief are not inoperable. When testing containment ventilation isolation from the area radiation monitors the vacuum relief valve for the train being tested is declared inoperable because it cannot perform its containment vacuum relief function when a CVI signal is present. The input from the area radiation monitors to the opposite train of SSPS is bypassed. This only affects the CVI signal from the area radiation monitors. A CVI signal from Safety Injection would still occur. Testing of the CVI radiation monitors occurs in the Main Control Room and is a short test. The operators are notified that the opposite train of CVI from the area radiation monitors is bypassed during the test.

Safety Summary:

During monthly testing of containment ventilation isolation the opposite train of containment ventilation isolation is bypassed to ensure that both trains of containment vacuum relief are not made inoperable. This test is performed from the Main Control Room and Operators are made aware of the bypassed containment ventilation isolation from the radiation monitors. This change to the FSAR does not affect any accident initiating systems. It does not affect any assumptions made in the FSAR regarding accident initiation. The probability of occurrence of an accident previously evaluated in the FSAR is not increased. This change will not increase the consequences of an accident however because the CVI radiation monitors are inoperable during testing. Bypassing the input to SSPS from the radiation monitors does not affect a containment ventilation isolation due to Safety Injection or Containment Isolation. This change will not increase the consequences of an accident evaluated previously in the FSAR. This change is a revision to the FSAR only. It does not affect the operation of plant equipment. The same equipment is still used and all FSAR assumptions regarding malfunctions of equipment are still valid. This change will not increase the probability of occurrence of a malfunction of equipment important to safety previously evaluated in the FSAR. This change does not modify any plant equipment. It does not make changes to any assumptions made in the FSAR regarding malfunctions of equipment important to safety. This change will not increase the consequences of a malfunction of equipment important to safety previously evaluated in the FSAR. This change does not add any new plant equipment or create any new system interactions. This change will not create the possibility of an accident of a different type than any previously evaluated in the FSAR.

This change does not add any new types of equipment. It does not create any new types of malfunctions to equipment. This change will not create the possibility of a malfunction of equipment important to safety of a different type than any previously evaluated in the FSAR. This change does not affect any margins of safety. Based upon the responses above, it has been determined that a USQ is not involved.

Title: ESR 99-00028, Cycle 10 Reload

Description:

The activity evaluated is the Cycle 10 reload; this includes changes resulting from the reload core design and plant changes identified as part of the Cycle 10 Plant Parameters Document review. The Cycle 10 Core Operating Limits Report (COLR) and revised sections of the FSAR are addressed as part of this safety analysis. The changes associated with the Cycle 10 reload are minor. In broad terms, the Cycle 10 Reload ESR demonstrates the following elements critical to the safety evaluation: (1) the new fuel introduced in Cycle 10 is identical to the fuel supplied for Cycle 9 for mechanical evaluation purposes, (2) the safety analysis supports Cycle 10 operation up to 489 EFPD and peak assembly enrichment is lower than Cycle 9 values, (3) the Cycle 10 core design has resulted in slight variations in the core power distributions that are not bounded by the Cycle 9 characteristics which required reperformance of the limiting DNB calculations and reanalysis of the MSLB core response, (4) a new analysis of record for the dropped rod event and turbine trip overpressurization event, (5) implementation of new methodologies for the LBLOCA and MSLB, and (6) Cycle 10 represents the first application of a recently approved neutronics methodology at Harris. The impact of the Cycle 10 changes has been evaluated and demonstrated to be acceptable within the current licensing basis.

Safety Summary:

The proposed activity involves the Cycle 10 reload ESR and evaluates the impact of the Cycle 10 reload on the existing analysis of record as documented in the FSAR and Tech Specs and Bases. Neither the Cycle 10 reload design nor any of the issues dispositioned in this safety evaluation impact any equipment or conditions that are initiators for Chapter 15 events. Operating conditions and normal system performance are unchanged; the reload will not increase the severity of the operating environment for any equipment or impose additional loads or operating demands on equipment. The operating conditions of the fuel are also unchanged and each assembly has been demonstrated to be acceptable for the maximum burn-up projected throughout Cycle 10 operation. The analysis performed in support of Cycle 10 demonstrates the continued compliance with the acceptance criteria established to ensure the radiological barriers are adequately protected during operation and postulated transient and accident conditions. There are no changes in the off-site dose assessments associated with Chapter 15 accidents. The analyses have shown that the licensing basis as defined by the Tech Specs, Tech Spec Bases, and FSAR (as revised) continue to be supported for Cycle 10. In summary, these changes do not increase the probability or consequences of accidents or malfunctions of equipment previously evaluated, do not introduce a different type of accident or malfunction of equipment, and do not reduce any margin of safety. Therefore, the proposed activity does not involve an unreviewed safety question.

Title: Main Turbine Protective Trips - AMSAC Trip

Description:

The activity evaluated is a revision to FSAR Section 10.2.2.5 to add the AMSAC trip of the turbine to the list of main turbine protective trips, which was added by design change PCR-2543. This PCR was implemented in Refueling Outage 1, but the FSAR section was not updated following PCR completion.

Safety Summary:

This change to the FSAR results from an omission of this AMSAC trip from the list of protective turbine trips. Installation of the AMSAC system has been previously evaluated and approved by the NRC in their safety evaluation for WCAP-10858, "AMSAC Generic Design Package" and is documented in the safety evaluation performed by CP&L for PCR-2543. This activity does not increase the probability or consequences of accidents or malfunctions of equipment previously evaluated, does not introduce a different type of accident or malfunction of equipment, and does not reduce any margin of safety. Therefore, the change does not involve an unreviewed safety question.

Title: ESR 00-00037, Removal of Differential Pressure Transmitters in Condensate System.

Description:

The activity evaluated is a change to the Condensate System which provides for the removal of several differential pressure transmitters and the valve manifolds currently located at the low pressure heaters, abandons the associated instrument tubing, and shuts and caps the instrument isolation valves and to document the root valves' position as normally shut.

Safety Summary:

The changes being made by ESR 00-00037 do not impact the performance of the Condensate System. These transmitters were used for data collection and do not provide input signals to any plant control functions. Therefore, these changes do not increase the probability or consequences of accidents or malfunctions of equipment previously evaluated, do not introduce a different type of accident or malfunction of equipment, and do not reduce any margin of safety. Therefore, the changes do not involve an unreviewed safety question.

Title: Revision to OST-1011, "Auxiliary Feedwater System Operability Test"

Description:

The activity evaluated is Revision 9 to OST-1011, "Auxiliary Feedwater System Operability Test". This is a rewrite of the procedure to incorporate Tech Spec Amendment 93 which changed the frequency for the turbine driven (TD) auxiliary feedwater (AFW) pump testing from monthly to quarterly on a staggered test basis. As a result, this monthly test no longer tests the pump, but instead performs the valve lineups that are still required monthly. The additional valves required for 1B-SB and the AFW flow paths were added to this procedure to allow voiding the corresponding monthly tests. Also maintained was the vendor recommendation to stroke the Flow Control Valves (FCVs) at least twice monthly to provide adequate stem lubrication. This procedure requires the installation of jumpers to simulate a pump running and allow the FCVs to cycle. In the case of the motor driven (MD) AFW pumps, the pumps are not declared inoperable, since the FCVs would receive an auto open signal if an AFW actuation signal were initiated. Since the TDAFW FCVs do not get this auto open signal, the pump is declared inoperable prior to installing the jumper. This evaluation is to determine the acceptability of installing a jumper in an operable safety system.

Safety Summary:

The proposed activity involves installation of jumpers to allow cycling the FCVs without starting the AFW pumps. The AFW system is a mitigating system, and not an initiating system. Installation of the jumpers across normally open contacts to simulate the associated pump running will not affect the ability of the contacts to perform their design function (arming the flow control valves after the pumps have started). The jumper simulates the condition that would be present after an AFW initiating signal. Regardless of whether the jumper is in or out, the response of the AFW system would remain unaffected. Therefore, this activity will have no affect on the probability or consequences of any accident or malfunction. No new failure mechanisms are introduced, since as far as the function of the contacts which are bypassed, it would not matter if the jumper was installed or removed. Installation of the jumper will not in itself cause an AFW start signal to be generated, and the AFW system remains functionally the same. The assumptions of Tech Spec bases for the AFW system remain valid. In summary, these changes do not increase the probability or consequences of accidents or malfunctions of equipment previously evaluated, do not introduce a different type of accident or malfunction of equipment, and do not reduce any margin of safety. Therefore, the proposed activity does not involve an unreviewed safety question.

Title: EST-400 Revision 10, Engineered Safety Feature Air Filtration Testing**Description:**

EST-400 addresses the testing of safety related air filtration units. The proposed changes incorporate ASTM D3803-1989 as the testing standard for charcoal samples, revises the acceptance criteria for charcoal sample methyl iodide penetration, adds referenced steps from other procedures, deletes referenced material, and corrects typographical errors.

Safety Summary:

Plant structures, systems, and components will not be operated in a different manner as a result of the proposed changes. No physical modifications to equipment are involved. The change to revise the standard to which charcoal samples are tested is accurate and reproducible. Accurate charcoal testing confirms the capability of the charcoal filters to perform in a manner that is consistent with the licensing basis by reducing the potential onsite and offsite consequences of a radiological accident by adsorbing radioiodine. This activity does not increase the probability or consequences of accidents or malfunctions of equipment previously evaluated, does not introduce a different type of accident or malfunction of equipment, and does not reduce any margin of safety. Therefore, the change does not involve an unreviewed safety question.

Title: 60 KVA One-Line Diagram Enhancement

Description:

The activity is an enhancement to FSAR Figure 8.1.3-3. Figure 8.1.3-3 is a one-line diagram depicting the 125 volt DC and AC system. The diagram is being changed to reflect the internal breakers for the 60 kva inverter.

Safety Summary:

The activity provides additional information to FSAR Figure 8.1.3-3 about the 60 kva inverter. No physical changes are being made to the plant or the way the plant is operated. The 60 kva inverter is non-safety related and non-seismic. Thus, the activity does not increase the probability or consequences of accidents or malfunctions of equipment previously evaluated, does not introduce a different type of accident or malfunction of equipment, and does not reduce any margin of safety. Therefore, the change does not involve an unreviewed safety question.

Title: Spent Fuel Pool Heatload Analysis

Description:

The proposed activity is an evaluation of the existing Spent Fuel Pool (SFP) heatload and the planned heatload due to core offload and fuel discharge for Refueling Outage 9 (RFO9), and additional fuel shipments during Cycle 10. Five separate cases involving refueling scenarios, including a postulated event requiring core offload outside of a refueling outage, are evaluated. These cases were evaluated to ensure that site systems (fuel pool cooling, component cooling water (CCW), and ventilation systems) can handle expected fuel pool heatloads under design limit conditions, and satisfy the applicable licensing basis requirements. The evaluation confirms that existing administrative controls on minimum decay time and CCW temperature bound the anticipated heatloads for RFO9 and Cycle 10, and provides for changes to the FSAR, plant procedures and other plant documents to reflect applicability of safety analyses for RFO9 and Cycle 10.

Safety Summary:

The proposed activity evaluates expected fuel pool heat loads for RFO9 and Cycle 10 and establishes conditions under which system functional requirements are met. No changes are being made to equipment involved in the handling of fuel assemblies, or to other plant equipment and structures associated with the initiation of an FSAR evaluated accident. No changes have been proposed in this activity which would affect the isotopic composition of irradiated fuel assemblies or plant systems used to limit releases of radioactivity following an accident. The items evaluated in this ESR and associated FSAR changes are within the scope of current operating practices, procedures and analyses. The calculations described in this ESR and the associated FSAR changes do not adversely affect the operation and ability of applicable equipment important to safety to perform their safety functions. There are no new components being added to the plant, and no modification of existing components, nor changes to their operating conditions. In summary, these changes do not increase the probability or consequences of accidents or malfunctions of equipment previously evaluated, do not introduce a different type of accident or malfunction of equipment, and do not reduce any margin of safety. Therefore, the proposed activity does not involve an unreviewed safety question.

Title: ESR 00-00057, Temporary Cross Tie- Instrument Air to Service Air

Description:

The activity evaluated is the temporary interconnection between Instrument Air System and Service Air System headers on the 261' elevation of the Reactor Auxiliary Building. The primary reason for the connection is to assure that the Essential Services Chilled Water (ESCW) expansion tank remains pressurized during a period when the main Service Air header will be shut down for a modification.

Safety Summary:

This change will allow an alternative source of compressed air to the ESCW expansion tank. This will not change the operating conditions or environmental parameters of the tank, since the air supplied will be at least as good as that from the Service Air System. This change will help ensure that the ESCW is able to function as designed. The temporary connection hose will include a check valve to assure that flow from the Service Air System to the Instrument Air System does not occur. Any post-accident function of Instrument Air will not be adversely affected, and Service Air is not expected to operate post-accident. The temporary modification will be removed prior to the end of Refueling Outage 9. This activity does not increase the probability or consequences of accidents or malfunctions of equipment previously evaluated, does not introduce a different type of accident or malfunction of equipment, and does not reduce any margin of safety. Therefore, the change does not involve an unreviewed safety question.

Title: PLP-106 Rev. 21, Technical Specification Equipment List and Core Operating Limits Report

Description:

The activity evaluated is a change to PLP-106, Technical Specification Equipment List and Core Operating Limits Report. The changes incorporated include a change to Attachment 1 Table Notations, which describes a 4.75 second limit on RTD/thermowell thermal time constant. This value has been corrected to be 4.25 seconds based on engineering review and input and will be consistent to the current FSAR Table 16.3-1 notations. A change is being made to FSAR Table 16.3-6 and PLP-106 in order to include 6 circuits that need to be added to the list of containment penetration conductors. The 4.75 second value appears to have been a transposition error during a previous PLP-106 revision. The addition of the power supplies circuits is the result of a discovery by Engineering that these circuits had the potential to create higher than previously expected currents in the penetrations during electrical short conditions, which means that they needed to be included under the testing program. Administrative changes are being made to reflect recent changes from plant specific documents to corporate NGG procedures which have taken their place.

Safety Summary:

This revision to PLP-106 involves a correction to Attachment 1 Table Notations, the addition of 6 circuits to the equipment list in Attachment 6, and some administrative changes. These changes do nothing to the physical condition of any plant equipment. Testing of the circuits added will be consistent with testing the other circuits already listed and will serve to decrease accident risk by increasing the monitoring of equipment important to safety. As such, this activity does not increase the probability or consequences of accidents or malfunctions of equipment previously evaluated, does not introduce a different type of accident or malfunction of equipment, and does not reduce any margin of safety. Therefore, the change does not involve an unreviewed safety question.

Title: Initial Criticality and Low Power Physics Testing (LPPT)**Description:**

The proposed activity evaluated is Revision 6 to EST-923, "Initial Criticality and Low Power Physics Testing". The proposed changes incorporate use of intermediate range NIS for the reactivity signal, procedural enhancements, as well as Cycle 10 specific changes and various administrative changes.

Safety Summary:

The proposed changes for initial criticality and LPPT do not introduce new SSCs into the plant, and do not involve modifications to any existing SSCs. The proposed changes are within the design capabilities of the chemical and volume control system (CVCS) or rod control system to control reactivity and provide for the required maneuvers of boron concentration and rod position. No equipment is made inoperable during this testing; and there is no adverse impact on indications available to the operator to monitor plant status during testing. The test is conducted in compliance with the current Tech Spec requirements, including special test exceptions. The additional contingency actions in the procedure enhance response to equipment malfunctions (i.e., rod control or CVCS). The proposed change to permit use of an intermediate range nuclear instrument (NI) decreases the probability of occurrence of a spurious reactor trip by using an isolated signal, and by allowing all four power range NIs to be operable during the test. The testing requirements and acceptance criteria are unchanged except for cycle-specific updates implemented by the reload ESR 9900028 (evaluated in SE #00-0140 also summarized in this submittal). The test continues to assure that operation of the reactor in the upcoming fuel cycle meets applicable design requirements, and assures that the assumptions of the accident analysis remain bounding. In summary, these changes do not increase the probability or consequences of accidents or malfunctions of equipment previously evaluated, do not introduce a different type of accident or malfunction of equipment, and do not reduce any margin of safety. Therefore, the proposed activity does not involve an unreviewed safety question.

Title: ESR 99-00023, Removal of three-stuck closure studs and one guide stud/bushing from the reactor vessel flange and restore the reactor vessel stud holes to an acceptable design condition

Description:

The proposed activity provides a repair method to remove the stuck reactor vessel closure studs and guide stud/bushing in accordance with approved vendor procedures.

Safety Summary:

The repair and potential modifications (installation of a stud hole sleeve) restores the stud holes to an acceptable configuration. The design meets the design basis requirements, material requirements and construction standards for the plant. There is no impact to overall system performance. There is no change to system interfaces. There is not an increase in probability of occurrence of an accident previously evaluated in the SAR. The initiating parameters of accidents previously evaluated in the SAR are not changed by the results of the ESR. This activity does not alter any assumptions previously made in evaluating the consequences of an accident. Nor does this activity change, degrade or prevent any actions necessary for precluding an accident. Therefore, the consequences have not changed as a result of ESR 99-00023. This activity will occur during the de-fuel mode of RFO-9. Precautions and limitations are specified in the ESR to preclude any damage to the reactor vessel/ o-ring sealing flange surface. Inspections of the o-ring sealing flange surface will be done prior to setting the cover plate and after removal to ensure no damage was done to the flange. There is not an increase in occurrence of a malfunction of equipment important to safety previously evaluated in the SAR. This activity does not alter any assumptions previously made in evaluating the consequences of an accident. Nor does this activity change, degrade or prevent any actions necessary for precluding an accident. The proposed activity provides a repair method to remove the stuck reactor vessel closure studs and guide stud/bushing. This activity restores the vessel closure studs to an acceptable condition. Therefore, the consequences have not changed as a result of ESR 99-00023. This activity does not reduce any margin of safety. Therefore, the change does not involve an unreviewed safety question.

Title: ESR 99-00085, Sample Cooler for Condenser Vacuum Pump Radiation Monitor

Description:

The activity evaluated is a modification to dry and cool the condenser vacuum exhaust sample going to the condenser vacuum pump radiation monitor (REM-01TV-3534) so that water will not get into the radiation monitor. A heat exchanger is installed in line upstream of the moisture removal unit and moisture control unit in order to dry and cool the condenser vacuum pump radiation monitor sample. The heat exchanger is mounted such that condensation from the cooled sample drains to the moisture removal unit. Normal Service Water is used to cool the radiation monitor sample.

Safety Summary:

Addition of the heat exchanger to cool the condenser vacuum pump radiation monitor sample is necessary to allow the monitor to perform its design function. The supplied sample is too hot and wet to be cooled and dried by the installed moisture control unit. The additional heat load on Normal Service Water is very small and has already been evaluated. A leak of Normal Service Water supplying the heat exchanger at REM-01TV-3534 would not adversely affect the Normal Service Water system. This modification does not affect any accident initiating or mitigating equipment for any accident evaluated previously in the FSAR; nor does it affect any equipment important to safety. The equipment affected by this modification is part of the Normal Service Water system or Condensate Air Evacuation/Radiation Monitoring system and is Quality Class E, Non-Nuclear Safety Related. Therefore, this change does not increase the probability or consequences of accidents or malfunctions of equipment previously evaluated, does not introduce a different type of accident or malfunction of equipment, and does not reduce any margin of safety. Therefore, the change does not involve an unreviewed safety question.

Title: ESR 99-00325, Replacement of Condensate System Bypass Line Valve

Description:

ESR 99-00325 replaces a butterfly valve in the Condensate System with a gate valve. The reason for the change is to reduce turbulence in the connecting piping line. The affected line is the condensate bypass line which returns condensate from Blowdown Heat Recovery heat exchangers to the Condensate Polisher discharge. The line is used during hot weather, to allow increased flow of condensate and assure that the blowdown to the blowdown demineralizers does not exceed the maximum allowable temperature.

Safety Summary:

Replacement of the butterfly valve with the proposed gate valve will eliminate the swirling flow that was inherent with the butterfly valve, and will reduce the likelihood of flow induced damage to the connecting piping. The condensate and blowdown systems are not initiating systems in a Chapter 15 accident and the change in valve type will not affect system response or reliability. These changes do not increase the probability or consequences of accidents or malfunctions of equipment previously evaluated, do not introduce a different type of accident or malfunction of equipment, and do not reduce any margin of safety. Therefore, the changes do not involve an unreviewed safety question.

Title: EST-709 Revision 17, RCS Flow Determination By Calorimetric

Description:

EST-709 accomplishes measurement of RCS flow rate (loop and total) to assure compliance with Technical Specifications (TS) each 18 months and to provide scaling information for RCS flow loops. The changes to EST-709 incorporates a new uncertainty analysis by Westinghouse which justifies use of ERFIS computer points in lieu of direct measurements in the PICs and justifies not requiring steam generator blowdown instrumentation to meet the 21 day calibration assumption. In addition, ESR 9900154 is incorporated, which eliminates the Smart Net instrumentation system, adds new ERFIS points for feedwater temperature and flow instruments, as well as new procedures for calibrations. TS Amendment No. 95 is also incorporated, which relocates the surveillance requirement met by EST-709 to another TS, places a requirement to conduct the test within 24 hours of reaching 95% power, eliminates the upper flow limit, and eliminates the 21 day calibration requirement for the precision instruments (this is still retained for specific instrumentation in the Westinghouse uncertainty analysis). Other administrative corrections are implemented, as well as changes to use the revised referenced spreadsheet for the calculations.

Safety Summary:

The proposed changes to the test methodology for measuring RCS flowrate do not result in any physical changes to actual flowrate. The procedure will continue to assure RCS flowrate is verified per TS requirements and meets the minimum assumptions of the accident analyses. The changes implemented by ESR 9900154 were evaluated by Westinghouse, and so the new uncertainty analysis used is consistent with this ESR. The uncertainty analysis bounds the existing requirements in TS for 2.1% overall uncertainty. Therefore, assumptions in the accident analyses regarding RS flowrates are not affected by the new test methodology. The changes required to implement TS Amendment No. 95 are administrative in nature with regard to the point during startup and power escalation when the surveillance is performed, and has no impact on actual conduct of the test or data analysis. The new acceptance criteria which eliminates the upper flow limit has been evaluated and approved by the NRC. This activity does not increase the probability or consequences of accidents or malfunctions of equipment previously evaluated, does not introduce a different type of accident or malfunction of equipment, and does not reduce any margin of safety. Therefore, the change does not involve an unreviewed safety question.

Title: OST-1125 Revision 7, Reactor Coolant Pump A Undervoltage and Underfrequency Trip Actuating Device Operational Test Quarterly Interval Modes 1 - 5

Description:

The activity evaluated is a procedure revision to allow testing of the "B" train undervoltage relay for "A" reactor coolant pump (RCP) while "A" train relay is inoperable. The procedure incorporates engineering recommendations for installing a jumper to clear alarms associated with the inoperable train "A" relay. This will allow testing of the B train relay.

Safety Summary:

The failure of the RCPs has been previously analyzed. No fission product barriers are affected by this change. Onsite and offsite dose analysis remain unchanged. The installation of a jumper to allow testing of the B train undervoltage relay will not affect the analysis of the consequences of loss of RCPs. The RCPs will continue to operate within the assumptions in the SAR and Technical Specifications. No new failure mode was introduced. This activity does not increase the probability or consequences of accidents or malfunctions of equipment previously evaluated, does not introduce a different type of accident or malfunction of equipment, and does not reduce any margin of safety. Therefore, the change does not involve an unreviewed safety question.

Title: ESR 00-00106, Temporary Modification on the Annunciator System.

Description:

This activity temporarily defeats annunciator ALB-10/4-1, RCP BUS UNDERVOLTAGE, to reduce operator distractions until repairs of the RCP Bus undervoltage logic can be completed in refueling outage 9.

Safety Summary:

The annunciator system is not safety related and does not mitigate the consequences of an accident. The alarm was locked in due to failure of the "B" train undervoltage logic in the "A" Reactor Coolant Pump control circuitry. The annunciator remains locked in due to the failed logic. HNP has complied with the TS by placing the affected channel in the "tripped" condition. The annunciator receives input from the "A" and the "B" train RCP logic. In order to monitor the remaining operable train, HNP will defeat the input from the failed RCP logic to the annunciator. This will not affect the operation of the reactor protection system or any other safety related component. Therefore, this change does not increase the probability or consequences of analyzed accidents, nor introduce a different type of accident or equipment malfunction. The proposed change does not decrease the margin of safety as described in the Technical Specifications and no unreviewed safety question exists.

Title: Operability Evaluation for Small Hole in ESW Piping**Description:**

This 10 CFR 50.59 review evaluates the operability of the Emergency Service Water System with a pin-hole leak at valve 1SW-139. The evaluation determined that operability of the ESW system was not affected by this condition.

Safety Summary:

This evaluation demonstrates that the ESW System is still fully capable of performing its design and TS function. A small pin-hole leak was discovered at valve 1SW-139, a drain line on the ESW system piping. For conservatism, this analysis assumed the 1" drain line would break completely. The applicable drain line is on the return piping from the "B" Essential Services Chiller. Consequently, the required flow would still pass through the Chiller and not affect operability of the Essential Services Chilled Water System. Potential flooding due to the potential drain line break was also evaluated. This evaluation shows that the pin-hole leak would not affect operability of the ESW system or any other safety related component. Therefore, this change does not increase the probability or consequences of analyzed accidents, nor introduce a different type of accident or equipment malfunction. The proposed change does not decrease the margin of safety as described in the Technical Specifications. Therefore, no unreviewed safety question exists.

Title: Temporary Change Approval Requirement

Description:

Revision to FSAR Section 1.8, Reg. Guide 1.33, for Temporary Change approval. The revision will allow any member of Operation's Management with an SRO license to be the interim approver. HNP is presently committed to ANSI 18.7 - 1976 which in Section 5.2.2 stipulates that the supervisor in charge of the shift will be one of the interim approvers for temporary Changes to procedures. The FSAR Review Approval Form is to take exception to this requirement.

Safety Summary:

Section 13.5.1.2 Preparation of Procedures, states that "Safety-related activities are conducted in accordance with detailed written and approved procedures, consistent with the requirements of ANSI 18.7 and Reg. Guide 1.33." Section 1.8 describes to the extent that HNP complies to the different Regulatory Guides. For regulatory Guide 1.33, QUALITY ASSURANCE PROGRAM REQUIREMENTS, CP&L endorses ANSI N18.7-1976 with specified clarifications. Nothing in the clarifications addresses the Temporary Change process. The Technical Specifications relocated to the FSAR by License Amendment 92 included words/instructions related to the Temporary Change process. These words/instructions in Section 17.3.4.2.2 specify that: (a) the intent of the original procedure is not altered; (b) the change is approved by two members of plant management staff with one of them holding a Senior Operator license on the unit affected; and (c) the change is documented, reviewed, and approved within 14 days. Since all of the licensed SROs go through the same LOR training and since the Control Room Supervisors (CRS) are part of plant management, it seems prudent to allow other individuals other than the "supervisor in charge of the shift" to approve Temporary Changes. Many times when TCs are needed, it is a critical need where the Superintendent -Shift Operations would be involved in other tasks. This change will allow a reduction in administrative activities for the S-SO. Section 13.5.1.3 of the FSAR lists a "shall not" for the S-SO of not engaging in administrative functions that detract from the overall responsibility for assuring safe operation of the Unit under the S-SO command. Other S-SOs and CRSs that are available would be equally knowledgeable in the activity needing the change. The Temporary Change process is an administrative function that is not part of accident analysis. If any thing, allowing other individuals other than the on shift S-SO to be the interim approver will result in a better quality review/evaluation. A better quality review/evaluation would improve the Temporary Change process. The proposed change is strictly an administrative function and does not involve any equipment operation. The proposed change will involve individuals with the same knowledge and qualifications. Allowing other individuals to perform the Temporary Change interim approval will minimize distractions to the on shift S-SO in the operation of the plant. There would be no negative impact on any previously evaluated accident. The proposed change is strictly an administrative function and does not involve any equipment operation. The proposed change will allow the S-

SO to better focus on the operation of the plant. This is an administrative change that does not impact the Tech Spec basis. It is related to an activity that has been removed from Tech Spec. This activity does not increase the probability or consequences of accidents or malfunctions of equipment previously evaluated, does not introduce a different type of accident or malfunction of equipment, and does not reduce any margin of safety. Therefore, the change does not involve an unreviewed safety question.

Title: ESR 00-00126, Operability Evaluation for "A" ESW Screen Wash Pump

Description:

This 10 CFR 50.59 review evaluates the operability of the "A" Emergency Service Water (ESW) Screen Wash Pump. This pump did not meet the Code acceptance criteria when DP was tested per OST-1214 on 4/6/00. This evaluation shows that the pump is still capable of performing its design function and is operable.

Safety Summary:

This evaluation demonstrates that the "A" ESW Screen Wash Pump is still fully capable of performing its design and TS function. The screen wash pump remains capable of providing high- pressure spray to the traveling screens. The required ESW Screen Wash pressure is 65 psig. This evaluation shows that the screen wash system can still provide the required pressure and is therefore operable. Therefore, this change does not increase the probability or consequences of analyzed accidents, nor introduce a different type of accident or equipment malfunction. The proposed change does not decrease the margin of safety as described in the Technical Specifications. Therefore, no unreviewed safety question exists.

Title: Warehouse Access Record Keeping

Description:

The activity evaluated is a change to FSAR Section 1.8, Regulatory Guides. Specifically, a clarification is being made to how HNP complies Regulatory Guide 1.38. The clarification pertains to the statement in ANSI N45.2.2 – 1972 (Packaging, Shipping, Receiving, Storage and Handling of Items for Nuclear Power Plants), Section 6.6 which states: "Written records shall be prepared that include such pertinent information as storage location, inspection results, protection, and personnel access." CP&L's position on Paragraph 6.6, Storage Records, is being further clarified to state that for record purposes, personnel access to storage areas will not be recorded.

Safety Summary:

This is an administrative change in recording personnel access to indoor storage areas of uninstalled materials. This change does not involve any procedure involved in the configuration or manipulation of plant SSCs. As such, this activity does not increase the probability or consequences of accidents or malfunctions of equipment previously evaluated, does not introduce a different type of accident or malfunction of equipment, and does not reduce any margin of safety. Therefore, the change does not involve an unreviewed safety question.

Title: ESR 00-00142, Containment Fan Cooler AH-3 Exhaust Diffuser Duct Improvement

Description:

This ESR restores the configuration of the diffuser, which was found damaged at the discharge of the safety related Containment Fan Cooler Air Handler AH-3. It adds an intermediate runner (bracing) at mid-span of the splitters in the diffuser as per existing design details. This diffuser is for post accident discharge above the operating floor and ensures containment air mass mixing. ESR 97-00551 added a 5 foot duct extension between the main header and the diffuser to alleviate loose article concerns during previous refueling outages. This duct extension was evaluated as an acceptable design per ESR 97-00551, however during this ESR investigation it was identified that this duct should have been Category S1 versus the prescribed Category B. This ESR (ESR 00-00142) evaluated this current condition as acceptable as is.

Safety Summary:

This duct piece has been in service during the times when the nozzle damper has been open (temperature >118F) and it has performed well. Additionally, during this ESR investigation it was identified that there was a Type JS-1 penetration referenced in ESR 97-00551 as listed on the print but which doesn't exist. The duct diffuser and extension has been evaluated acceptable without the penetration support. However, the FSAR Figures show this penetration detail and must be revised. Other than the figure revision, the conditions mentioned above do not affect the facility as described in the SAR. The fixes and evaluation in this ESR are to bring the diffuser back to the original specification. These changes do not increase the probability or consequences of accidents or malfunctions of equipment previously evaluated, do not introduce a different type of accident or malfunction of equipment, and do not reduce any margin of safety. Therefore, these changes do not involve an unreviewed safety question.

Title: Changes to the FSAR related to Fire Protection

Description:

The activities evaluated are a number of proposed changes to FSAR sections 7.4, 9.5.1, 9.5.A, 9.5.1.2.2, and 9.5.3.3. These changes involve a variety of activities. Change 1 is to FSAR Section 9.5.1 and is to revise a statement in the section to reflect current industry testing and qualification methods for Main Control Room carpet. Changes 2, 3, and 4 involve the removal of references to 10CFR50 Appendix R from sections 7.4, 9.5.1.2.2, and 9.5.3.3 and incorporate a reference to NUREG 0800, BTP CMEB 9.5-1 where appropriate. Change 5 is being made to resolve conflicting FSAR descriptions for the operation of multi-cycle fire suppression systems using local manual devices that do not exist as described in the FSAR.

Safety Summary:

Change 1: Industry testing methods for the carpeting used in the Main Control Room (MCR) have changed. The accepted industry test is no longer per NFPA 225 as stated in the FSAR. Instead, NFPA 253 and NFPA 101 requirements which are more restrictive are being used. Carpet meeting the revised requirements will be resistant to flame spread and the generation of smoke to the more current industry standards. The revised test methods do not represent a reduction in the fire protection program.

Changes 2, 3 and 4: NUREG 0800 includes technical requirements previously contained in Appendix R of 10CFR50. The FSAR changes included in this revision are to remove references to Appendix R and reference the NUREG as appropriate since the HNP fire protection program, as accepted by the NRC, documents compliance with BTP CMEP 9.5-1 (NUREG 0800). These changes do not affect the design inputs or basis for NRC acceptance of the HNP fire safe shutdown documentation. These changes are not a reduction in fire protection and do not affect any of the inputs, assumptions or results of analyses documented in the FSAR, or SSA that demonstrate that the HNP can achieve safe shutdown in the event of a fire.

Change 5: The changes to the FSAR make the fire suppression system descriptions consistent with actual plant configuration. The current plant arrangement supports the fire protection program "defense in depth" concept in that it provides both automatic suppression and manual fire fighting capability if needed. The manual backup method credited here is the manual fire suppression which is initiated by the fire brigade using local hose racks and fire extinguishers. A number of multi-cycle suppression systems are credited for providing protection of circuits necessary to support the safe shutdown of the plant in the event of fire in the area. The elimination of credit for manual release devices on the multi-cycle systems and/or the remote manual release capability will not adversely affect the ability of the systems to automatically actuate and the plant to achieve and maintain safe shutdown in the event of a fire.

These changes to fire protection system descriptions in the FSAR do not involve any physical changes to plant structures, systems, or components (SSCs) nor do they change the way in which plant SSCs are operated or maintained. Therefore, these changes do not increase the probability or consequences of accidents or malfunctions of equipment previously evaluated, do not introduce a different type of accident or malfunction of equipment, and do not reduce any margin of safety. Therefore, these changes do not involve an unreviewed safety question.

Title: Minor Contamination of the ESW System**Description:**

This 10 CFR 50.59 review evaluates the impact of operating the Emergency Service Water (ESW) system, with minor contamination, as required by NRC Bulletin 80-10 "Contamination of Nonradioactive System and Resulting Potential For Unmonitored, Uncontrolled Release of Radioactivity to Environment". Condition Report AR 18862 documents an event during refueling outage 9 where radioactive contamination was inadvertently introduced into the "B" ESW return header piping. Contamination entered the ESW system when a hose was connected between the plant service air system and a connection on the ESW piping. The hose was later determined to be contaminated.

Safety Summary:

HNP evaluated the contamination and determined that the 10 CFR 50 Appendix I and TS limits were not exceeded. HNP determined that resumption of ESW system operation was acceptable and will not have a significant impact on nuclear safety. Therefore, this change does not increase the probability or consequences of analyzed accidents, nor introduce a different type of accident or equipment malfunction. The proposed change does not decrease the margin of safety as described in the Technical Specifications. Therefore, no unreviewed safety question exists.

Title: ESR 00-00151, Fuel Transfer System Emergency Pull Cable Temporary Modification

Description:

The activity evaluated is a temporary modification that removes the emergency pull cable from the fuel transfer system. This is being done to permit fuel transfer activities subsequent to the failure of the shear pin and damaging of the emergency pull cable on April 21, 2000. The emergency pull cable provides a means of pulling the transfer cart out of the transfer tube and into the units 1 & 4 transfer canal should the normal means of movement, a chain drive, fail. The transfer tube has a manually operated gate valve on the fuel handling building side and a flanged connection on the containment side. The purpose of the gate valve and the blind flange are to provide containment isolation while operating. During defueling/refueling operations, the gate valve is opened, the blind flange removed, and the cavity is flooded. This water in the cavity precludes direct communication between the containment atmosphere and the outside atmosphere. Thus, the gate valve and the blind flange are not needed to provide containment isolation while defueling/refueling is in progress. Similarly, neither the gate valve nor the blind flange is required for isolating the fuel handling building or the containment building from each other should a loss of water inventory occur while in modes 5 and 6. The design of the spent fuel pools precludes losing water inventory below the spent fuel. The fuel transfer cart will be removed from the fuel transfer tube prior to power operations such that the gate valve can be shut and the blind flange installed. A review of design and licensing documents shows that this emergency pull cable is not relied upon to retrieve the transfer cart from the transfer tube under any conditions.

Safety Summary:

The emergency pull cable is part of the fuel transfer system. This system is not an initiator for any accident scenario in the SAR. The accident analysis in the SAR does not contain a description of failure of the transfer cart by any means. The gate valve and blind flange on the ends of the transfer tube are not credited for any isolation function while in modes 5-6. The fuel transfer cart will be removed from the transfer tube prior to power operations such that the gate valve can be shut and the blind flange installed prior to power operations. This activity does not increase the consequences of an accident previously evaluated. The purpose of the manual gate valve is to provide containment isolation for normal (non fuel movement) operations. The absence of the emergency pull cable means that while it would be harder to move the transfer cart out of the transfer tube should the situation arise, it does not constitute a malfunction of the gate valve or the transfer tube. Thus, the activity does not increase the probability of occurrence of a malfunction of equipment important to safety previously evaluated. Nor does it increase the consequences of a malfunction of equipment important to safety previously evaluated. Should the transfer cart stop in the transfer tube without the emergency pull cable being available, a diver would be required to connect a cable to the transfer cart such that the

cart can be pulled out of the transfer tube. Such a course of action does not introduce the possibility of an accident of a different type than any previous evaluated. The only safety-related components that could be affected by the transfer cart stopping in the transfer tube without the emergency pull cable being available, are the transfer tube and the manual gate valve on the fuel handling building side of the transfer tube. Discussions above have shown why such a situation involving the transfer cart does not constitute a malfunction of the gate valve or the transfer tube. Thus, the proposed activity does not create the possibility of a malfunction of equipment important to safety of a different type than any previously evaluated in the SAR. Technical Specifications or their associated bases do not mention or take credit for the emergency pull cable, require operation of the manual gate valve or installation of the blind flange, or describe any margin of safety. Therefore, the proposed activity does not reduce the margin of safety as defined in the bases for any Technical Specification. Therefore, the change does not involve an unreviewed safety question.

Title: ESR 00-00152, Rev. 0, Cable Splice/Repair for Cable 10292G in Cable Tray C1201

Description:

This activity provides a procedure to repair cable 10292G. Cable 10292G runs from Containment Penetration No. S1249 to the ALB -B in the Control Room. The cable was cut at the Reactor Auxiliary Building wall penetration E784. This cable provides annunciation for the Reactor Coolant Pump-C Standpipe Level Switch.

Safety Summary:

ESR 00-00152 provides justification and design for the repair of damage to cable 10292G. The repair will consist of splicing in a new section of cable. The splices will be in cable tray C1201. The functionality of the affected circuit is not changed in any way. The splice is constructed of standard approved materials using standard methodology found in 6-B-060. The circuit is non-Class 1E in design and function. Since there will be no impact on the circuit from the cable repair, the evolution will be transparent to the operation of the system. An increase in the consequence of an analyzed accident cannot therefore occur. The ESR maintains qualified plant design and therefore does not introduce the probability of an accident previously evaluated in the SAR. In summary, this change does not increase the probability or consequences of accidents or malfunctions of equipment previously evaluated, does not introduce a different type of accident or malfunction of equipment, and does not reduce any margin of safety. Therefore, the proposed activity does not involve an unreviewed safety question.

Title: ESR 00-00192, Removed Booster Pump Seal Water Lines

Description:

The activity evaluated is to not have the condensate seal water supply line orifices installed in the condensate booster pump seal water lines. The orifices were removed in the past but no documents were revised to reflect this. The evaluation determined that the current condition is acceptable. The activity revises plant drawings and FSAR Figure 10.2.2-6 to match field configuration.

Safety Summary:

The condensate booster pumps and associated components are non-safety related and no credit is taken for them in any accident analysis in the FSAR. Additionally, no problems with the condensate booster pump seals has been noted in the five years the orifices are thought to have not been installed. As such, this activity does not increase the probability or consequences of accidents or malfunctions of equipment previously evaluated, does not introduce a different type of accident or malfunction of equipment, and does not reduce any margin of safety. Therefore, the change does not involve an unreviewed safety question.

Title: Purity Meter Modification

Description:

This FSAR change provides for the use of a temporary purity meter during generator purging operations. The temporary meter is used to supplement the installed hydrogen purity meter. The design of the temporary meter is such that it is more accurate than the installed meter.

Safety Summary:

The generator hydrogen gas system is not discussed in any of the accidents previously evaluated in the SAR. The meter provides indication only and does not have an automatic function. The temporary meter does not interface with any other system other than generator hydrogen gas. Therefore, this change does not increase the probability or consequences of analyzed accidents, nor introduce a different type of accident or equipment malfunction. The proposed change does not decrease the margin of safety as described in the Technical Specifications. Therefore, no unreviewed safety question exists.

Title: ESR 95-00903, Renovation of Stores Receiving Building to In- Processing Building

Description:

The Stores Receiving Building was renovated to function as the site's In-Processing Building. ESR 95-00903 addresses the fire Protection and Detection Systems to the building. The Fire Protection Systems are modified because the function of the building was revised from material handling and storage to being manned by administrative personnel providing services for in processing and training. FSAR Figures are required to be revised due to renaming of the building from Stores Receiving Building to the In-Processing Building.

Safety Summary:

Although the Fire Protection and Detection Systems have been modified for the function of the In-Processing Building, the site's Fire Protection/Detection Program is not affected. The National Fire Protection Association Code governs installation, fabrication, and testing of these systems. Materials used are also controlled by the NFPA Code; thereby, maintaining the design integrity of the systems. The Fire Protection and Detection Systems in the In Processing Building do not provide protection for any safety related SSC's. Component tags for the Fire Protection and Detection Systems are revised for the renaming of a site building/facility and the changing of tag descriptions is below the level of detail given in the SAR; therefore, this activity does not increase the probability or consequences of accidents or malfunctions of equipment previously evaluated, does not introduce a different type of accident or malfunction of equipment, and does not reduce any margin of safety. Therefore, the change does not involve an unreviewed safety question.

Title: PLP-201 Revision 37, Emergency Plan**Description:**

The proposed activity evaluated is Revision 37 to PLP-201, "Emergency Plan". The proposed changes include: (1) changing on-shift staffing to allow one of the non-licensed operators (NLOs) to be assigned to Fire Brigade duties, which reduces staffing from 16 to 15; (2) removing Murray and Trettle as the primary contracted weather service and replacing with contracted weather services; and (3) several administrative changes.

Safety Summary:

The proposed changes to the Emergency Plan do not affect how plant safety related structures, systems, or components function or operate. These changes are administrative in nature and do not involve the addition of any new hardware. The change to the on-shift staffing requirements allowing one NLO to be assigned to the Fire Brigade, thus allowing a reduction of the on-shift staffing from 16 to 15, has been analyzed to not affect design, material or construction standards and not affect system performance. The use of one NLO also assigned to the Fire Brigade satisfies credible accident and emergency related staffing assignments. Reduction of on-shift NLO staffing is consistent with the Tech Specs and procedures as originally accepted by the NRC. Use of electronic technology has increased since contracting with Murray and Trettle weather service. During recent storm events, the ERO utilized the Internet extensively for up-to-date weather information. This technology utilization pointed out that a primary contracted source of weather information for an event was no longer necessary, but the service will continue on an as needed basis. In summary, these changes do not increase the probability or consequences of accidents or malfunctions of equipment previously evaluated, do not introduce a different type of accident or malfunction of equipment, and do not reduce any margin of safety. Therefore, the proposed activity does not involve an unreviewed safety question.

Title: Corrections to FSAR Figures

Description:

The changes being made to the FSAR are administrative corrections. FSAR Figure 11.2.2-3 and the associated design drawing (2165-G-0815) are being revised to show the correct valve designation number for valve 7WL-D206-1-4. This typo occurred when the associated design drawing's media was changed. The revision also provides for relocating this valve on the print to eliminate confusion. No field changes are required and the relocation only serves to make the drawing more user friendly.

PCR-6020 modified flows from air handler AH-41 (1X-NNS). PCR-6020 updated drawings to correctly show a 1300 CFM flow from the HVAC Equipment Room. FSAR Fig. 9.4.3-6 and its associated design drawing (2168-G-0533 S05) was not updated and incorrectly shows the flow at 1600 CFM. FSAR No field changes are required and PCR-6020 has evaluated the flow change that will be accomplished by this correction.

FSAR figure 7.4.1-8 and associated design drawing 2166-SK-E-0260 (Auxiliary Control Panel Arrangement) are being revised to correct several ACP labels. These changes are an "as built" based on the appropriate control wiring diagrams and FSAR Section 7.4.1. Additionally, a note is being added to state that the drawing and figure provide the ACP general layout and labeling changes are performed in accordance with approved plant procedures. This revision will effect no physical changes in the plant.

Safety Summary:

These administrative corrections do not modify plant SSCs important to safety or change design bases, codes and standards or normal/emergency operating procedures. This activity does not alter design bases margins as defined in the Technical Specifications, SAR, or NRC SER. This activity does not increase the probability or consequences of accidents or malfunctions of equipment previously evaluated, does not introduce a different type of accident or malfunction of equipment, and does not reduce any margin of safety. Therefore, the change does not involve an unreviewed safety question.

Title: RAF 2752, Met Tower Instrumentation

Description:

The activity evaluated is a proposed change to FSAR Table 2.3.3-2, Remote Data Access Equipment. The table describes the major system components of the meteorological monitoring system. The change revises the manufacturer and model number of the modems and CRT display to commercially available proven components.

Safety Summary:

Manufactures and model numbers of the meteorological monitoring system were changed to commercially available components. This change deletes the manufacturer and model number in Table 2.3.3-2 and revises it to commercially available proven modem and commercially available proven CRT display. These changes allow flexibility in replacement since the components can change rapidly. Design documents do not specify the manufacturer and model of the modems or CRTs. The meteorological monitoring system is non-safety related. The change to FSAR Section 2.3.3 is administrative in nature and does not involve any physical changes to plant structures, systems, or components (SSCs) nor does it change the way in which plant SSCs are operated or maintained. Therefore, this change does not increase the probability or consequences of accidents or malfunctions of equipment previously evaluated, does not introduce a different type of accident or malfunction of equipment, and does not reduce any margin of safety. Therefore, the change does not involve an unreviewed safety question.

Title: Removal of the FSAR reference to STSS database.

Description:

The activity evaluated is a proposed change to the FSAR that describes the Surveillance Tracking Database that is listed as an administrative control

Safety Summary:

The proposed change to the FSAR is to remove the Surveillance Tracking Database that is listed as an administrative control. Procedure ADM-NGGC-0203, Preventive Maintenance and Surveillance Testing Administration has been written to provide guidance for administration of the Preventive Maintenance Program and the Surveillance Testing Program. These programs are being replaced with the new INDUS Passport database. The change is administrative in nature and does not involve any physical changes to plant structures, systems, or components (SSCs) nor does it change the way in which plant SSCs are operated or maintained. Therefore, this change does not increase the probability or consequences of accidents or malfunctions of equipment previously evaluated, does not introduce a different type of accident or malfunction of equipment, and does not reduce any margin of safety. Therefore, the change does not involve an unreviewed safety question.

Title: Administrative Revision to FSAR Figure 2.1.3-4

Description:

An administrative revision is being made to FSAR Figure 2.1.3-4 to remove the population table from the figure. An updated table exists elsewhere in the FSAR (Table 2.1.3-6).

Safety Summary:

FSAR Figure 2.1.3-4 is revised to delete the 1989 SHNPP permanent resident population estimates. The information is listed in Table 2.1.3-6, Emergency Planning Population (10 Mile EPZ) based on a Study by Earth Tech December 1996 which is based on 1996 population data. No changes are being made to any plant equipment. This change does not increase the probability or consequences of accidents or malfunctions of equipment previously evaluated, does not introduce a different type of accident or malfunction of equipment, and does not reduce any margin of safety. Therefore, the change does not involve an unreviewed safety question.

Title: Editorial/Administrative FSAR Changes

Description:

The activity evaluated is a change to the FSAR to incorporate several editorial and administrative changes. The evaluation covers the following specific changes; 1) changes several references to TS Section 6.0 to FSAR 17.3 that were previously missed during implementation of License Amendment 92, 2) changes several position titles (i.e. Superintendent – Radiological Services to Supervisor – Radiological Services, Executive Vice President – Energy Supply to President – Energy Supply, Vice President – Nuclear Engineering to Director – Nuclear Engineering, Superintendent – Plant Support Services to Manager – Plant Support Services) 3) changes the organization title Corrective Action/Operating Experience Unit to Self Evaluation Unit, 4) adds sentence stating Manager – Nuclear Assessment reports to the VP – Harris Plant which is consistent with statements already in the FSAR, and 5) corrects several typographical errors.

Safety Summary:

The changes being evaluated are administrative/organizational in nature and do not involve any physical changes to plant structures, systems, or components (SSCs) nor does it change the way in which plant SSCs are operated or maintained. Therefore, this change cannot increase the probability or consequences of accidents or malfunctions of equipment previously evaluated, nor introduce a different type of accident or malfunction of equipment, and does not reduce any margin of safety. Therefore, the change does not involve an unreviewed safety question.

Title: Facilities in the Owner Controlled Exclusion Area

Description:

The activity evaluated is to identify facilities located within the Owner Controlled Exclusion Area and the amount of time it normally takes to evacuate these areas if it becomes necessary. The FSAR is being updated to list the facilities and the estimated time it normally takes to evacuate the area.

Safety Summary:

This change identifies the Wake County Fire Training area, HNP Firing Range, and the Cary Police Department Firing Range, which are all located within the Owner Controlled Area and may require evacuation in the event of a plant emergency requiring the evacuation. It is estimated that normally not more than 75 personnel combined will occupy these areas at one time and could be evacuated with thirty minutes. There are no physical changes being made to any SSCs by this activity. This change does not increase the probability or consequences of accidents or malfunctions of equipment previously evaluated, does not introduce a different type of accident or malfunction of equipment, and does not reduce any margin of safety. Therefore, the change does not involve an unreviewed safety question.

Title: Manager Shift Operations Position Added

Description:

The activity evaluated is the addition of the position Manager Shift Operations. This position will fulfill the responsibility of the designated off-shift Operations superintendent who holds an SRO license and has responsible for licensed activities and supervising shift work..

Safety Summary:

This change does not affect the responsibility of a designated Operations superintendent who holds an SRO license being in charge of licensed activities and supervising shift work. The change only further defines an SRO licensed individual given this responsibility. There are no changes in individual qualifications as a result of this change. This change does not increase the probability or consequences of accidents or malfunctions of equipment previously evaluated, does not introduce a different type of accident or malfunction of equipment, and does not reduce any margin of safety. Therefore, the change does not involve an unreviewed safety question.