



**Carolina Power & Light Company**

Robinson Nuclear Plant  
3581 West Entrance Road  
Hartsville SC 29550

Serial: RNP-RA/00-0048

**APR 11 2000**

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

H. B. ROBINSON STEAM ELECTRIC PLANT, UNIT NO. 2  
DOCKET NO. 50-261/LICENSE NO. DPR-23

**REPORT OF CHANGES PURSUANT TO 10 CFR 50.59**

Ladies and Gentlemen:

Carolina Power & Light (CP&L) submits the attached report in accordance with 10 CFR 50.59(b)(2), "Changes, Tests, and Experiments," for the H. B. Robinson Steam Electric Plant (HBRSEP), Unit No. 2. The report provides a brief description of changes, tests, and experiments that were implemented pursuant to 10 CFR 50.59 between April 15, 1998, and March 30, 2000. A summary of the safety evaluation for each item is also included in the enclosed report. The report is being submitted by April 24, 2000, as required.

If you have any questions concerning this matter, please contact Mr. Harold Chernoff.

Sincerely,

R. L. Warden  
Manager - Regulatory Affairs

EBS/ebs

Attachment

c:      Mr. L. A. Reyes, NRC, Region II  
          NRC Resident Inspector, HBRSEP  
          Mr. R. Subbaratnam, NRC, NRR

IE47

**Summary of Changes, Tests, and Experiments for the  
H. B. Robinson Steam Electric Plant (HBRSEP)**

**USQD No. 97-0143, Rev. 01**

**Description**

This activity inspects and replaces Emergency Diesel Generator (EDG) skid mounted lube oil piping from the engine driven lube oil pumps to their associated lube oil filters. Revision 0 of this Unreviewed Safety Question Determination (USQD) was reported to the NRC on October 14, 1998.

**Summary of Safety Evaluation**

The piping was replaced with an identical section of piping fabricated with full penetration welds. These conservative actions increase the long term reliability of the EDGs and aid in a better understanding of the actual construction techniques present on the EDG skid mounted piping. The change to the EDG piping was evaluated to be better than existing piping with respect to the known condition of the existing piping welds. The EDG is not a precursor to an accident therefore it has no effect on the probability of occurrence of an accident previously evaluated. The increased reliability will not increase the consequences of an accident. The improved piping will decrease the likelihood of EDG failure increasing system reliability. No new failure modes are introduced by these changes. The margin of safety as defined in Technical Specifications bases is not decreased by the increased reliability of the EDG. A subsequent leak test was performed after the applicable EDG had been fully loaded for 20 minutes to ensure the replaced piping had reached and maintained normal system operating pressures and temperatures for at least 10 minutes prior to inspection. This method of Post Maintenance Testing is determined to be acceptable since it would be allowed for American Society of Mechanical Engineers (ASME) Boiler & Pressure Vessel (BP&V) Code class 3 piping, which exceeds the current requirements for the portion of piping being replaced. As such, an Unreviewed Safety Question was determined not to exist.

**USQD No.97-0191**

**Description**

This revision makes various changes to the reactor trip response procedure EPP-4.

**Summary of Safety Evaluation**

No safety significant deviations from the Westinghouse Owner's Group (WOG) Emergency Response Guideline (ERG), ES-0.1 were made, nor do any of the revisions alter requirements described in the Updated Final Safety Analysis Report (UFSAR) or the Technical Specifications. One step was added to the End Path Procedure (EPP) which is intended to satisfy a Carolina Power & Light (CP&L) Company commitment to the NRC that an event involving potential

United States Nuclear Regulatory Commission

Attachment to Serial: RNP-RA/00-0048

Page 2 of 72

missile damage to the Diesel Fuel Oil Transfer pumps following a high wind scenario would be resolved by procedure enhancements developed in accordance with the Severe Accident Management Guidelines (SAMGs). Rather than allow a Loss of Offsite Power (LOOP) to progress to a Station Blackout (SBO) due to the loss of the transfer pumps, and then progress to a core damage scenario, a step has been added to EPP-4 to check for proper pump operation for all scenarios and provides for a specific inspection for scenarios involving high winds. This is a change to the commitment made for the Individual Plant Examination of External Events (IPEEE) Supplemental Response. The remaining changes made to the procedure do not affect items described in the Safety Analysis Report (SAR). Therefore, an Unreviewed Safety Question was determined not to exist.

**USQD No. 98-0076**

**Description**

Revision 15 to the Offsite Dose Calculation Manual (ODCM) removes shutdown requirements under certain release conditions and replaces with a requirement to restore release concentrations within allowable limits without delay. The majority of the remaining Revision 15 changes were Radiation Monitoring System (RMS) nomenclature changes with no methodology changes.

**Summary of Safety Evaluation**

The revision, which removes existing shutdown requirements when release limits are exceeded, is consistent with NRC position in NUREG 1301 in that the NUREG does not contain shutdown requirements when release limits are exceeded. In most cases, shutdown will not reduce the concentration of the release but will increase the plant liquid and gaseous processing, and subsequent releases. In addition, the shutdown process is not designed to immediately reduce the release rate to the environment except in the case of primary to secondary leakage, which is addressed by existing plant procedures that require the Plant Nuclear Safety Committee (PNSC) to address continued operation at elevated leak rates. The removal of shutdown requirements from the ODCM does not involve any physical changes to plant systems, structures, or components (SSC) or the manner in which they are operated. Therefore, the probability or consequences of a malfunction of equipment important to safety previously evaluated in the SAR are not increased. The revision does not alter assumptions of the safety analysis, so it does not create the possibility of a different type of malfunction of equipment important to safety than any type previously evaluated in the SAR. Therefore, an Unreviewed Safety Question was determined not to exist.

**USQD No. 98-0079**

**Description**

The UFSAR Figures 9.2.3-1 & 9.2.3-2 for the Primary and Makeup Water (P&MW) System were revised to reflect recent modifications.

### **Summary of Safety Evaluation**

The change has no impact on the performance or operation of the system, it only updates the Primary and Makeup Water System UFSAR figures to reflect current design. This system is not used to mitigate an accident nor can it be assumed to be an accident initiator, so the changes do not increase the probability or consequences of an accident previously evaluated. The changes to the figures do not affect equipment important to safety as defined in the SAR, so the probability or consequences of a malfunction of equipment important to safety previously evaluated in the SAR is not increased. As such, an Unreviewed Safety Question was determined not to exist.

### **USQD No. 98-0082**

#### **Description**

Training Program Procedure TPP 219, Fire Protection Training Program, which is an administrative procedure outlining program requirements for fire protection related training was revised. The change incorporates various administrative type changes, clarifies requirements and specifies certain minimum performance objective for the fire brigade.

### **Summary of Safety Evaluation**

The proposed changes to the procedure do not change the facility. These changes were made to clarify and strengthen the existing training and fire drill requirements. These types of changes do not increase the probability of a fire accident nor do they preclude the mitigation of a fire accident. No accident scenarios are introduced by the proposed changes so they cannot create an accident scenario that is different from those described in the SAR. Active and passive fire protection features of the plant remain unchanged. None of the proposed changes will decrease the effectiveness of the plant fire brigade. Thus, the margin of safety, as defined in the bases of any Technical Specification, is not reduced. As such, an Unreviewed Safety Question was determined not to exist.

### **USQD No. 98-0085**

#### **Description**

The UFSAR description of the Main Steam Line Break (MSLB) event (Section 15.1.5) was revised to reflect recent analysis performed to demonstrate the acceptability of variable shutdown margin curve in the Robinson Nuclear Plant (RNP) Core Operating Limits Report (COLR). The change also incorporates minor editorial changes and corrections not specifically associated with the new analysis.

### **Summary of Safety Evaluation**

The new analysis demonstrates that the Departure from Nucleate Boiling (DNB) calculated for the case when shutdown margin is at 1000 pcm and 640 ppm boron concentration, as allowed by the Core Operating Limits Report (COLR), is about 1.60 which is well above the limit of 1.144 established for the Biasi correlation with the required mixed core penalty. The DNB at this point is more limiting than the End of Cycle (EOC) case previously assumed to be limiting. Therefore, the UFSAR was revised to show this as the limiting case. The new MSLB case continues to demonstrate DNB values will remain well above the DNB acceptance limit. Therefore, the margin of safety is not reduced. This change demonstrates that the more limiting core remains within the acceptance limit. Therefore, an Unreviewed Safety Question was determined not to exist.

### **USQD No. 98-0086**

#### **Description**

The UFSAR was revised to clarify design criteria applied in Section 1.8, "Conformance to NRC Regulatory Guides," and Section 7.4, "Systems Required for Safe Shutdown."

### **Summary of Safety Evaluation**

This is an administrative change to the UFSAR to clarify design criteria and as such does not affect the probability or consequences of an accident previously evaluated in the SAR, create the possibility of an accident of a different type than previously evaluated in the SAR, affect the probability or consequences of a malfunction of equipment important to safety previously evaluated in the SAR, create the possibility of a malfunction of equipment important to safety of a different type than previously evaluated in the SAR, or reduce the margin of safety as defined in the Bases of any Technical Specification. Therefore, an Unreviewed Safety Question was determined not to exist.

### **USQD No. 98-0087**

#### **Description**

Technical Requirements Manual Specification (TRMS) 3.6, "Chemical And Volume Control System (CVCS) - Boric Acid And Primary Water Storage Tank," was revised to increase the time allowed to achieve MODE 3 (from 6 hours to 36 hours) when no boric acid injection pathways are available from the boric acid tanks to the Reactor Coolant System (RCS) when the requirements to restore an inoperable boric acid transfer pump or one channel of heat tracing are not met, or when other requirements in TRMS 3.6 are not met.

### **Summary of Safety Evaluation**

The revision is acceptable because the revised allowed time still permits shutdown to MODE 5 to be achieved within the required 72 hours and the required boration for shutdown is available from the Refueling Water Storage Tank (RWST). The allowed time to reach MODE 3 for boric acid injection pathways is unrelated to initiation of accidents described in the SAR. The RWST is available through separate paths to assure that boric acid can be injected into the RCS after a unit shutdown in response to an accident in order to insure a return to criticality does not occur as a result on xenon decay. Use of the RWST as an alternate source for boron injection into the RCS is already considered in the SAR as requirements contained in Technical Specification Surveillance Requirements. Therefore, an Unreviewed Safety Question was determined not to exist.

### **USQD No. 98-0088**

#### **Description**

An engineering evaluation was performed to demonstrate that the presence of a through wall leak at a weld in the CVCS system does not affect the ability of the system to perform its design basis or safety related functions. The CVCS system was and is considered operable with this condition in existence.

### **Summary of Safety Evaluation**

Operation of the CVCS system boric acid transfer line with the through-wall weld defect does not affect the probability of a previously evaluated accident. The leak is negligible considering the overall system flow rate and is well above the necessary capacity. Therefore, the consequences of a previously analyzed accident would not be increased. Operation with the leak creates no new accident scenarios. The presence of the negligible leak has no effect on safety related equipment nor their ability to perform their function. The margin of safety is not affected as there is more than adequate flow available for boration of the reactor coolant system. Therefore, an Unreviewed Safety Question was determined not to exist.

### **USQD No. 98-0090**

#### **Description**

Several POWERTRAX source code modifications were implemented to restore and improve the functionality of the ISO and SDB modules for RNP POWERTRAX.

### **Summary of Safety Evaluation**

These changes were of two types. The first consists of correction of code malfunctions identified by corrective action reports. There is no negative impact on the safe operation of the plant

because these changes ensure that the pertinent POWERTRAX modules (ISO and SDB) now perform as intended. The second type are improvement items that involve minor output edits. In addition, one change involves a correction to the module so that it performs as intended. The change does not have any negative impact on plant operations because: 1) it corrects items identified by corrective action reports to ensure the code performs as intended; 2) it yields shutdown boron concentration values that are consistent with Technical Specification requirements and maintains the margin of safety; and 3) the associated source code changes are limited to a few lines which have been demonstrated to perform as expected and there are no changes to methods or functions. Therefore, an Unreviewed Safety Question was determined not to exist.

### **USQD No. 98-0091**

#### **Description**

UFSAR Section 1.2.2.7 was revised to include information missing from the paragraph regarding the electrical distribution system. UFSAR Section 6.2.2.2.a was revised to add information to clarify the actual Heating Ventilation Recirculation (HVH) motor loading during an accident condition. UFSAR Figures 1.2.2-10 and 1.2.2-12 were revised to reflect the latest revision to the associated plant drawing.

#### **Summary of Safety Evaluation**

The changes are an enhancement to the UFSAR to clarify the actual plant configuration and to correct typographical errors. These changes do not increase the consequences or probability of the occurrence of an accident previously evaluated in the SAR. The UFSAR changes are administrative enhancements to properly describe the facility as presently designed and built. The changes do not impact the design function of any systems described in the Technical Specifications and as such do not change or reduce the margin of safety. Therefore, an Unreviewed Safety Question was determined not to exist.

### **USQD No. 98-0092**

#### **Description**

The normal means of cooling to the auxiliary boilers and the main steam roughing sample coolers was temporarily removed to replace carbon steel piping with stainless steel piping in the service water piping to the auxiliary boilers and main steam rough sample coolers.

#### **Summary of Safety Evaluation**

The service water piping to the auxiliary boilers and main steam rough sampling coolers are not credited, referenced or used; in the probabilistic assessment of the occurrence of any accident in the SAR or in the mitigation of any accident in the SAR. The auxiliary boilers and the main

steam rough sampling coolers are not considered important to safety and are classified as non-nuclear equipment. The sampling system of concern consists solely of secondary sampling of an unused system (MS rough coolers) and a system that is used only during shutdown conditions where the main steam system cannot supply auxiliary steam (auxiliary boilers). These systems are not covered in the Technical Specifications. Therefore, the change does not impact the margin of safety as defined in the Bases of any Technical Specification. As such, an Unreviewed Safety Question was determined not to exist.

#### **USQD No. 98-0093**

##### **Description**

Administrative changes were made to the Robinson Emergency Plan (PLP-007) to reflect current terminology and practice. This included such things as rearranging and adding steps in Section 5.3, "REACTOR VESSEL," to coincide with the facility where the task is primarily performed, combining the Technical Analysis Director and Accident Assessment Team Leader sections, deleting a calendar from the list of methods for providing public information, revising the frequency for independent audit, revising the description of the Plant Nuclear Safety Review Committee (PNSC) and revising the description of the Severe Accident Management (SAM) program.

##### **Summary of Safety Evaluation**

None of the changes to the Emergency Plan delete a previously performed function without a coincident reduction in regulatory requirement. As such, this revision does not reduce the effectiveness of the Emergency Plan. Additionally, these changes do not interface with safety related systems or equipment relied upon to mitigate UFSAR evaluated accidents. Specifics of the Emergency Plan are not addressed in the Technical Specification. Therefore, an Unreviewed Safety Question was determined not to exist.

#### **USQD No. 98-0094**

##### **Description**

A temporary modification was made to supply deep well water to the top of containment to assist in cooling containment during summer months.

##### **Summary of Safety Evaluation**

The temporary installation of a fire hose, along with the water it contains and wind loading on the hose, will not induce weight loading on safety related structures that would cause unacceptable stress loading. The inherent ruggedness of the structures involved preclude any damages as a result of placing the weight of the fire hose, water, and wind on the structures. As installed, the water will flow down the sides of the dome section and into the normal drainage

**United States Nuclear Regulatory Commission**

Attachment to Serial: RNP-RA/00-0048

Page 8 of 72

trench to be carried away by the storm drain system. The low volume of water sprayed will not overwhelm the normal storm drainage system. The temporary installation has no adverse effect on any component or structure important to safety. Therefore, an Unreviewed Safety Question was determined not to exist.

**USQD No. 98-0095**

**Description**

The Inservice Testing Program (IST) was revised to require additional testing and measurements for selected components. The IST Program was also revised to reclassify certain components, list additional testing features which are already being performed or are planned, and remove certain components from the program due to being outside the ASME B&PV Code boundary and the inclusion of components noted to be absent from the plan.

**Summary of Safety Evaluation**

The implementation of this revision to the IST Program is commensurate with approved Codes and Standards which govern IST. The creation of additional accident scenarios is not credible as a result of this procedure change. The additional testing and administrative clarifications and changes implemented via this document cannot place the facility in an unanalyzed condition. This revision improves the ability to detect component degradation for certain components which is likely to reduce the probability of occurrence of equipment malfunction. Therefore, an Unreviewed Safety Question was determined not to exist.

**USQD No. 98-0096**

**Description**

UFSAR Figure 10.1.0-5 was revised to remove a non-safety related instrument from the drawing and show its associated root valve as closed.

**Summary of Safety Evaluation**

The Masoneilan controller on the steam driven auxiliary feedwater pump failed and was abandoned in place since replacement parts were not available and the controller was not needed for the pump to operate. The removal of the non-safety related equipment does not interfere with the operation of equipment assumed to operate for safe shutdown. The equipment removed does not affect any safety related equipment, nor is it assumed in the mitigation of an accident. Removal reduces the chances of an equipment malfunction since there is one less component associated with the steam driven auxiliary feedwater pump that can fail. The pump has been verified to operate correctly without input from the controller. As such, revision of the UFSAR Figure to reflect removal of the controller was determined not to be an Unreviewed Safety Question.

**USQD No. 98-0098**

**Description**

The valve position verification procedure was revised to allow securing each manual containment isolation valve in the closed position, in lieu of verifying the valves are closed every 31 days.

**Summary of Safety Evaluation**

The valves will remain in the normally closed position for containment isolation purposes. The change does not alter any system alignments required to maintain containment integrity, it only adds a requirement for securing devices to ensure valves are maintained closed in lieu of periodic verification of valve position. The change allows continued compliance with TS Surveillance Requirement (SR) 3.6.3.2 by securing the valves in the closed position. Therefore, an Unreviewed Safety Question was determined not to exist.

**USQD No. 98-0100**

**Description**

UFSAR Section 13.0, "CONDUCT OF OPERATIONS," was revised to incorporate the new engineering organization to be identified as the Robinson Engineering Section.

**Summary of Safety Evaluation**

The change in the engineering organization does not affect the design, construction, operation, maintenance, or testing of Structures, Systems, and Components (SSCs) described in the Safety Analysis Report (SAR). The change does not affect accident initiators or initial condition assumptions in the accident analyses. The change does not affect accident mitigating SSCs or mitigation assumptions in the accident analyses. It does not introduce any new methods of operation, maintenance or testing of SSCs or introduce any new accident scenarios not previously considered in the accident analyses. The change does not affect process variables or operating restrictions for which margins of safety are established nor does it introduce any new equipment failure mechanisms of SSCs not previously considered in the accident analyses. Therefore, an Unreviewed Safety Question was determined not to exist.

### **USQD No. 98-0102**

#### **Description**

Abnormal Operating Procedure (AOP) 024, "Loss of Instrument Bus," was revised to clarify the indication expected for Loss of Instrument Bus 2 and 3 in the 4KV Bus Undervoltage (UV) and Underfrequency (UF) Bistables to assure correct indication is provided in the procedure. UFSAR Section 7.5.2.2 was also revised to reflect the same.

#### **Summary of Safety Evaluation**

The change of the available indications listed in the procedure and UFSAR does not affect the set probability of a loss of Instrument Bus. The revision will assure the correct indication is provided in the procedure. This eliminates possible confusion and may improve the probability of a correct diagnosis. This revision does not alter or effect the probability or consequences of any equipment malfunction important to safety previously evaluated in the SAR. The indications provided during a loss of an Instrument Bus are not described in the Bases for any Technical Specification, therefore the change does not alter the margin of safety as described in the Bases of any Technical Specification and no reduction in margin is made. As such, an Unreviewed Safety Question was determined not to exist.

### **USQD No. 98-0103**

#### **Description**

The administrative special procedure for procedure processing using the electronic document management system was revised to enhance the instructions for using the procedure.

#### **Summary of Safety Evaluation**

The revision is only an enhancement to the instructions for the electronic document management system and has no effect on the operation of the plant or the margin of safety discussed in the Bases of any Technical Specification. Therefore, an Unreviewed Safety Question was determined not to exist.

### **USQD No. 98-0104**

#### **Description**

The Industrial Security Plan was revised to include compensatory actions put in place during the replacement of the security computer.

### **Summary of Safety Evaluation**

The compensatory measures used during the replacement of the security computer were evaluated against the provisions of 10 CFR 50.54(p) and determined not to decrease the safeguards effectiveness of the Industrial Security Plan. The compensatory measures continue to provide Operations personnel with appropriate access to plant equipment. No changes were made that could increase the probability or consequences of an accident previously evaluated. Due to the nature of this change to the Industrial Security Plan, there is no impact on plant equipment that could increase the probability of occurrence or consequences of a malfunction of equipment important to safety or of a different type than previously evaluated in the SAR. Since plant operations is unaffected, there was no reduction of the margin of safety as defined in the bases of any Technical Specification. Therefore, an Unreviewed Safety Question was determined not to exist.

### **USQD No. 98-0105**

#### **Description**

The condensate measuring system was modified to add a strainer to downstream of the level transmitter and upstream of the isolation solenoid valve.

### **Summary of Safety Evaluation**

The containment sump used to collect unidentified LEAKAGE and the fan cooler condensate measuring system monitors are instrumented to alarm for increases of 0.5 to 1.0 gpm in the normal flow rates. The modification, which installed a strainer to the condensate measuring system downstream of the level transmitter and upstream of the isolation solenoid valve, does not affect the system's ability to measure 0.5 to 1.0 gpm. The condensate monitoring system is not an initiator of any accident described in Chapter 15 of the SAR so modifying it cannot increase the probability of occurrence of any accident previously evaluated in the SAR. The system is used to assist Operators in determining RCS leakage and since the strainer has no effect on that function the consequences of any accident previously evaluated is not increased. The new strainer will not have an adverse effect on the system's ability to measure RCS leakage so the change does not impact the margin of safety as defined in the bases of any technical specification. Therefore, an Unreviewed Safety Question was determined not to exist.

### **USQD No. 98-0106**

#### **Description**

Technical Management Procedure (TMM) 004, "Inservice Inspection Testing," was revised to incorporate changes that are necessary to improve the Inservice Testing (IST) program. Additional testing requirements were added to increase the confidence in component ability to perform requisite functions.

#### **Summary of Safety Evaluation**

The additional testing, administrative clarifications and other changes implemented cannot place the facility in an unanalyzed condition. The changes involve the clarification of certain component's categorization, the inclusion of a component as an augmented activity, valve size corrections and administrative changes. As such, the probability of occurrence or the consequences of an accident previously evaluated in the SAR is not increased. The creation of additional accident scenarios is not credible as a result of this procedure change. This change improves the ability to detect component degradation which is likely to reduce the probability of occurrence of equipment malfunction. The changes ensure that the test program for pumps and valves listed in TMM-004 are conducted in a manner consistent with applicable rules and requirements and will not increase the consequences as a result of equipment malfunction. Therefore, an Unreviewed Safety Question was determined not to exist.

### **USQD No. 98-0107**

#### **Description**

A new 4 inch valve and separate available discharge path for the "A" deepwell (DW) pump was installed for use in future modifications or special procedures. Corresponding UFSAR Figures 9.3.2-1 and 9.3.2-2 were revised.

#### **Summary of Safety Evaluation**

The deepwell system is not an initiator of any accident, so the addition of the valve cannot increase the probability of occurrence of an accident previously evaluated. This modification does not adversely affect the ability of the "A" DW pump to contribute its share of the 600 gpm total flow from all three DW pumps to the AFW suction. The new components are physically located outside the protected area and cannot affect any safety related equipment. No scenario could be postulated due to this modification that would create the possibility of a malfunction of equipment important to safety of a different type than any previously evaluated in the SAR. The Deepwell system is not listed in the Technical Specifications. Therefore, the margin of safety as defined in the bases of any Technical Specification is not reduced. As such, an Unreviewed Safety Question was determined not to exist.

**USQD No. 98-0109**

**Description**

A Notice of Enforcement Discretion (NOED) was requested to allow the maximum allowable Service Water (SW) temperature of 95°F to be exceeded for 8 hours.

**Summary of Safety Evaluation**

A review of the UFSAR accident analysis verified that neither the SW system nor the systems that it supports are called out as the cause of any of these events. The change does not allow other systems to be operated outside their design limits. With no performance requirements for other systems being relaxed, there is no additional challenge to fuel cladding or the reactor coolant system boundary. Operation for brief time periods with slightly elevated SW temperatures does not create a new means of accident initiation. Effects of increased SW temperatures on equipment important to safety were evaluated as acceptable and therefore did not introduce any new failure mechanisms not previously evaluated as acceptable. Based on the review, the limiting SW temperature is 99°F. The 8 hour allowance for exceeding the 95°F TS limit is not expected to result in more than a maximum 4°F increase in SW temperatures, and so provides adequate assurance of safe operation of equipment important to safety. There are no new equipment configurations from this change. There is no change to separation, environmental qualification of equipment, reliability, or redundancy. The change to ITS 3.7.8 does not change the SW design limitation of 95°F. It provides a completion time for restoring the temperature to within limits. The accident analysis has a low sensitivity to small increases in SW temperature. The 8 hour Completion Time is comparable to other corresponding existing Technical Specifications of similar safety significance which allow a plant condition outside the design basis for a short period of time. As such, an Unreviewed Safety Question was determined not to exist.

**USQD No. 98-0110**

**Description**

The Physical Security & Contingency Plan was revised to incorporate NRC rule changes, and to clarify and reformat the plan consistent with NUREG 0908, "Acceptance Criteria Effectiveness Of The Security Plan For The Evaluation Of Nuclear Power Reactor Security Plans."

**Summary of Safety Evaluation**

These changes were evaluated and determined not to decrease the safeguards effectiveness of the plan as described in 10 CFR 73.55(b) through (h) or the ability to defend the facility against the design basis threat as defined in 10 CFR 73.1. Therefore, an Unreviewed Safety Question was determined not to exist.

### **USQD No. 98-0111**

#### **Description**

The Service Water (SW) system was modified to provide a piped tie in location to be used for a temporary modification, which provides cool water injection to the containment Heating Ventilation Recirculation (HVH) units. UFSAR Figures 9.2.1-1 and 9.2.1-4 were revised to reflect the modification.

#### **Summary of Safety Evaluation**

The modification provides a tie in location for the SW system. The SW system is not an initiator of any design basis accidents so the probability of any events previously evaluated in the SAR remain unchanged. The SW continues to provide the same level of support required to mitigate the consequences of an accident as previously evaluated in the SAR. The tie in piping and valves are all safety related and seismic Class 1. The modification and associated UFSAR revision does not add equipment to the SW system that would change any long term assumptions made in the SAR or that would alter any previously evaluated malfunctions of equipment in the SAR. Malfunctions and transients were reviewed. The tie in does not increase the consequences of any of the postulated failures associated with the SW system. The tie in is used as seasonal equipment for providing a path for chill water via a temporary modification. The tie-in contains two check valves which have an active function to shut upon reverse flow secession in the unlikely event of a pipe break. The equipment addition was evaluated in the HBRSEP, Unit No. 2 Probabilistic Risk Assessment (PRA) and found not to effect risk or consequences. Therefore, an Unreviewed Safety Question was determined not to exist.

### **USQD No. 98-0112**

#### **Description**

This change implements a corporate procedure to standardize the methodology for providing a consistent and cost effective approach to comply with 10 CFR 50.55a. Subsections IWE/IWL of the ASME BP&V Code are being implemented to inspect the containment liner and containment concrete. The structure that is impacted is the containment structure. The containment is not impacted regarding its ability to perform its safety related function but the inspections will document the existing condition of the containment vessel (CV) Liner and the concrete exterior with respect to critical physical design parameters.

## **Summary of Safety Evaluation**

The procedure does not change the design or design intent of containment. Any design changes or evaluations of the inspections will be accomplished by an engineering design document. The inspections are non-destructive and will not degrade the physical structure of containment. The inspections do not require any testing. Any testing required as a result of the inspections will be accomplished by a separate engineering design document. Therefore, the change was determined not to result in an Unreviewed Safety Question.

### **USQD No. 98-0124**

#### **Description**

The change corrects the description of the BF3 Source Range detector in UFSAR 15.4.6.3.1.e to reflect that the detectors are located in "instrument wells in primary shield wall outside of the reactor vessel." UFSAR Section 15.4.6.3.1.e previously described the BF3 Source Range detectors as being "installed within the reactor vessel to provide direct monitoring of the core."

## **Summary of Safety Evaluation**

The response to positive reactivity additions such as a dilution event would be the same regardless of the location of the detectors. The trend in Source Range detector response, not the absolute magnitude, provides indication of a dilution event or fuel handling accident. Since the trend of Source Range channel indication in response to core reactivity changes is not affected by the detector location, monitoring the reactor core with Source Range detectors located outside of the reactor vessel would not degrade the Operator's ability to detect and mitigate a dilution event or fuel handling accident during Refueling. Therefore an Unreviewed Safety Question was determined not to exist.

### **USQD No. 98-0126**

#### **Description**

UFSAR Section 3.5.1.2 was revised to correct an inaccurate statement that indicated HBRSEP, Unit No. 2 maintains inservice bolting stresses in Nuclear Steam Supply System (NSSS) valves below values determined from ASME BP&V Section VIII, "Rules for Construction of Pressure Vessels." HBRSEP, Unit No. 2 does not maintain the inservice bolting stresses in NSSS valves below values determined from ASME BP&V Section VIII, since Section VIII provides no method for determining such values.

## **Summary of Safety Evaluation**

The change to the fourth sentence of the fourth paragraph of UFSAR Section 3.5.1.2 corrects an inaccurate statement. NSSS valve bolted connections, e.g., body to bonnet, are typically torqued

United States Nuclear Regulatory Commission

Attachment to Serial: RNP-RA/00-0048

Page 16 of 72

cold in accordance with applicable site procedures. The torque values in the site procedures are based on vendor recommendations, or in their absence, good industry bolting practices. When the valves reach operating temperature, the stresses in the studs typically drop to some undetermined value between the cold torque stress and the allowable design stress. This is recognized and permitted by ASME BP&V Code Section VIII.

The changes to enhance clarity are editorial in nature. In summary, the changes to UFSAR Section 3.5.1.2 do not constitute an Unreviewed Safety Question.

**USQD No. 98-0127**

**Description**

The Reactor Turbine Generator Board (RTGB) radiation monitor recorder was replaced. An evaluation was performed to allow the recorder to only provide a continuous plot for select points when the level of radiation activity has increased past an alert setpoint. Plant procedures and UFSAR 11.5.2 system descriptions were changed for several recorders.

**Summary of Safety Evaluation**

Previous reference was made to a multipoint recorder, which implied a continuous printout. This is no longer the case. A continuous printout for these monitors will occur when radiation increases past an alert setpoint. This is an acceptable change since the function of the recorder has not changed. Therefore, an Unreviewed Safety Question was determined not to exist.

**USQD No. 98-0128**

**Description**

The condition where cooler units HVH-7A and HVH-7B were valved out of service on two different occasions (in May 1992 and June 1989) was evaluated as not affecting the operability of safety components located in the Auxiliary Feedwater (AFW) pump room. This condition was contrary to UFSAR Section 9.4.8.1 which indicates that when starting any engineered safeguards pump, the room chiller unit in that area will start automatically.

**Summary of Safety Evaluation**

An engineering evaluation regarding that cooler units that were valved out of service in May 1992 and June 1989 demonstrated that safety components located in the AFW pump room would have operated satisfactorily during accident conditions. Therefore, the original Auxiliary Feedwater System which is required per Chapter 15 in the SAR for plant shut down was not degraded. Since the auxiliary feedwater would have been available as required under an accident condition, an Unreviewed Safety Question was determined not to exist.

### **USQD No. 98-0130**

#### **Description**

The condition where cooler units HVH-6A and HVH-6B contained unqualified cooler unit fan belt material was evaluated as not affecting the operability of safety components in the Safety Injection (SI) pump room. This condition was not in accordance with UFSAR Section 9.4.8.1.

#### **Summary of Safety Evaluation**

An engineering evaluation demonstrated that safety components located in the SI pump room would operate satisfactorily under an accident condition if it happened between the time frame the cooler units were potentially inoperable. Since components important to safety were evaluated to be acceptable under an accident condition without the operation of the coolers in the SI pump room, an Unreviewed Safety Question was determined not to exist.

### **USQD No. 98-0131**

#### **Description**

An evaluation was performed to allow one Residual Heat Removal (RHR) Pump Room Cooler to be removed from service for a 72 hour period

#### **Summary of Safety Evaluation**

Engineering evaluation concluded that the RHR Pump Room components would perform as need during an accident with only one of the room coolers available during the 72 hour out of service time frame. Further, even if an accident started at the end of the 72 hour period and the initially inoperable cooler failed, the equipment in the room would perform as needed for the duration of the accident. Although the equipment qualification (EQ) margin is reduced, the margin of safety would not be decreased. All Technical Specification components in the RHR Pump Room required to be operable are still considered operable by this evaluation. As such, an Unreviewed Safety Question was determined not to exist.

### **USQD No. 98-0132**

#### **Description**

Special Procedure (SP) 1438, "SDAFW Pump Emergency Cooling System Flow Test," was issued to provide the procedural guidance and administrative controls to run an SP on the Steam Driven Auxiliary Feedwater (SDAFW) Pump. The SP installed test instruments on an out-of service SDAFW Pump and collected data of the lube oil cooler flow rates under normal conditions and with an additional drain valve in the cooling water return line open to determine if an increase in lube oil cooling flow was achieved.

## **Summary of Safety Evaluation**

The configuration imposed by the SP, which is the only configuration not normally encountered during IST or Technical Specification required runs or Operating Procedures, involves opening a drain path in the lube oil cooler drain line. This should only serve to increase SDAFW pump flow through the cooler. There are sufficient administrative procedural controls to ensure that if an unexpected condition occurs appropriate actions are taken to secure the SDAFW Pump. Furthermore, this activity presents no greater risk to the plant or the public than is normally seen during routine testing or maintenance. The results of this SP are to be used as input to future calculations concerning the SDAFW Pump lube oil cooler capability. The generation or performance of this SP does not constitute an Unreviewed Safety Question.

## **USQD No. 98-0133, Rev. 01**

### **Description**

UFSAR Section 15.6.5, "Loss-of-Coolant Accidents," was revised to include a description of the plant response during the switchover of the Emergency Core Cooling System (ECCS) from the injection alignment to the recirculation alignment. A description of the analytical methodology and assumptions used to determine the plant response was also included in UFSAR Section 15.6.5.

An Unreviewed Safety Question Determination of the switchover analysis and methodology was performed as part of the Cycle 17 Reload Package but the description of the analysis and plant response including a second fuel clad heat and Peak Clad Temperature (PCT) was not included in the UFSAR. This change included this information in UFSAR Section 15.6.5.

## **Summary of Safety Evaluation**

The method for performing the switchover of the ECCS from the injection alignment to the recirculation alignment is consistent with the description and evaluation contained in UFSAR Sections 6.3.1 and 6.3.2. No new equipment is required to perform the switchover from injection to recirculation. The plant and equipment operating conditions are consistent with those normally seen during a Loss-of-Coolant Accident (LOCA). The information added to UFSAR 15.6.5 describes the plant response following a Large Break LOCA. The plant response following a Small Break LOCA has been analyzed separately and found to be much less severe than the blowdown response of a Small Break LOCA described in UFSAR Section 15.6.3 or the switchover response following a Large Break LOCA. Very conservative analysis assumptions have been used to ensure that a bounding PCT and clad oxidation values are calculated. The plant response predicted by the analysis and incorporated in UFSAR Section 15.6.5 show that the 10 CFR 50 Appendix K criteria are met. Therefore, an Unreviewed Safety Question was determined not to exist.

### **USQD No. 98-0134**

#### **Description**

An engineering evaluation was performed to evaluate the ability of the service water supply lines to the Diesel Generators (DG) A & B Air Coolers and the service water discharge lines from the DGs A & B jacket water coolers to perform their safety related function. All four lines are connected to the skid mounted Diesel Generators by a Vibraflex rubber pipe. The stress analysis erroneously modeled the connection as a rigid connection. Procedure EGR-NGGC-0320, "Civil/Structural Operability Reviews," was utilized to evaluate the qualification of these lines and concluded that all four lines are able to perform their safety related function. Per EGR-NGGC-0320, these lines have short term structural integrity.

#### **Summary of Safety Evaluation**

The stresses in the piping and piping supports were analyzed and determined capable of resisting the loading due to a design basis earthquake. The existence of a rubber expansion joint does not cause any adverse system interaction between the DG skid and the service water system. In fact, the expansion joint assists in isolating the potential skid induced vibration into the service water line by providing a flexible connection between the two systems. As such, an Unreviewed Safety Question was determined not to exist.

### **USQD No. 98-0135**

#### **Description**

UFSAR Section 12.3.3.1.2 was revised to indicate that a multipoint strip chart recorder is provided in the Radiation Monitoring System cabinets in the Control Room with capability of recording each monitoring channel. The UFSAR had indicated that the multipoint strip chart recorder was a 32 point recorder and that each monitoring channel was sequentially recorded.

#### **Summary of Safety Evaluation**

This statement describes the current model of strip chart recorder in the control room. The words "32 point," and "sequentially" are unnecessarily precise and not required. The new wording is more generic, while still conveying the required information. There is no assumption that the printout of this recorder is required to be sequential. There will be no change to the information available to the operator, only the precise sequence it is updated. Since there is no physical or electrical change to the facility, there can be no change in the chance or consequences of any accident scenario, nor to any Technical Specification bases. The change of the words 32 point to multipoint is to provide a more generic descriptive term. No change to the plant is involved. Therefore, an Unreviewed Safety Question was determined not to exist.

**USQD No. 98-0136**

**Description**

NGGM-IA-0003, "Transmission Interface Agreement for Operation, Maintenance, and Engineering Activities at Nuclear Plants," which establishes responsibilities and lines of communication for various organizations responsible for operation, maintenance, and engineering of the transmission facilities (i.e., switchyards, high voltage transformers and main generator metering and relaying) at Brunswick, Harris, and Robinson Nuclear Plants, was revised to clarify a number of areas, eliminate specific times for communications between System Operations and Nuclear Plant Control Room, define design impacting activities, and add a section on training.

**Summary of Safety Evaluation**

This Safety Evaluation covers the impact on plant safety due to the Interface Agreement. Specific projects related to transmission or related equipment will have their own discreet Safety Evaluations prepared. NGGM-IA-0003 requires that field work activities be evaluated prior to implementation, via pre-job briefings or safety/risk assessments. Transmission Substation Maintenance (TSM) personnel only perform work after being granted permission via work control procedures, and all TSM work is on non-Quality equipment. These controls ensure that no Unreviewed Safety Question exists.

**USQD No. 98-0138**

**Description**

A pipe cap was replaced on the low pressure side of the level instrumentation on each Boric Acid Storage Tank (BAST) with a tube assembly vented to the BAST room. The replacement is expected to eliminate the spurious LO-LO/LO/HI level alarms received as a result of pressure fluctuations in the tanks.

**Summary of Safety Evaluation**

Temporary removal of the pipe caps has resolved the level instrumentation problems temporarily in the past. After the modification, the Nitrogen flow rate to the room will be very small relative to the ventilation flow rate. There is no adverse impact on equipment served by the Nitrogen System. There is sufficient space to install the new components without preventing the operation of nearby valves. The new components will be securely installed and will not credibly affect equipment important to safety during a seismic event. The materials selected were corrosion resistant and compatible with interfacing components. Therefore, an Unreviewed Safety Question was determined not to exist.

**USQD No. 98-0140**

**Description**

New paragraph 1.7.2.8 was added to UFSAR Section 17.3, Appendix A to incorporate education allowances from American National Standards Institute (ANSI) Standard ANSI/ANS -3.1-1981, "Selection, Qualification and Training of Personnel for Nuclear Power Plants," for educational requirements for individuals who do not possess the formal education specified in the section.

**Summary of Safety Evaluation**

Change to UFSAR Section 17.3, Appendix A was made to permit alternatives to the education requirements for the Independent Safety Review Program. The evaluation found that this change to the Quality Assurance (QA) Program Description did not pose an Unreviewed Safety Question because the change did not affect the design, construction, operation, or testing of the facility and that the change did not increase the probability or consequences on any accident or equipment malfunction as analyzed in the Safety Analysis Report (SAR), neither did the change introduce any new accident or equipment malfunction not already considered in the SAR, neither did the change decrease the margin of safety. As such, an unreviewed Safety Question was determined not to exist.

This change was evaluated as not reducing a commitment to the QA Program, therefore, the change was made without prior NRC approval as allowed by 10 CFR 50.54(a)(3).

**USQD No. 98-0141, Rev. 01**

**Description**

Section 9.2.3 of the UFSAR provides a description of a single operating configuration of the Primary and Demineralized Water System. The configuration described is one of several possible operating configurations. The fact that it is the only configuration described leads the reader to conclude that it is the only valid configuration. This single configuration description was deleted from the UFSAR. Section 9.2.3.1 was changed to indicate that the two mixed beds referred to are polishing mixed beds. Section 9.2.3.2 was revised to delete specific enumeration of parallel components in the demineralizer system flow path, correct the erroneous references to actions and anions, delete the redundant statement pertaining to deoxygenated water, and correct the statement prior to the list of loads for demineralized water, since some of the listed loads are supplied by the Primary Water header.

**Summary of Safety Evaluation**

The most significant change is the deletion of the only described operating configuration for the Primary and Demineralized Water system. The other changes correct typographical errors, correct the misuse of the terms "cation" and "anion," and delete a redundant statement. The resulting changes provide a clearer description of the system as installed, and a less ambiguous

description of how the demineralizers accomplish their purpose. The Demineralized Water System is a non-safety related system whose function is to provide makeup to the Condensate Storage Tank (CST) in order to provide a suction to the AFW Pumps, makeup for the Refueling Water Storage Tank (RWST), makeup for the Hotwell, and provide a potential backup to the AFW Pump suction in the event of a loss of the lake. The only function that is safety related is the amount of water in the RWST and CST. These changes will have no impact on the amount or quality of water maintained in the CST and RWST. Therefore, an Unreviewed Safety Question was determined not to exist.

#### **USQD No. 98-0146**

##### **Description**

A drain line was added downstream of Service Water valve V6-16-16B in the Component Cooling Water Heat Exchanger (CCWHX) room. The modification is expected to allow drainage of line 16-CW-44 to permit replacement of V6-16A and C.

##### **Summary of Safety Evaluation**

An analysis concluded that sufficient pipe supports are available to accommodate added loads. The materials selected were compatible with the interfacing components and fluid. There was sufficient space to install the new drain line without preventing the operation or maintenance of nearby components. Debris produced from the boring operation was retrieved from the system. Procedures existed to control abnormal conditions. Therefore, an Unreviewed Safety Question was determined not to exist.

#### **USQD No. 98-0148**

##### **Description**

Information relocated to UFSAR Section 13.2 from Technical Specifications as part of the conversion to Improved Standard Technical Specifications (ITS) contained an incorrect reference to Appendix A of 10 CFR 55. Appendix A was incorporated into the body of 10 CFR 55 in May 1987. This revision deletes the out of date reference to Appendix A of 10 CFR 55.

##### **Summary of Safety Evaluation**

Through final rule 52 FR 9453, effective May 26, 1987, an amendment to 10 CFR 55 was implemented which included the incorporation of Appendix A of 10 CFR 55 into 10 CFR 55.59. The statements of consideration supporting this change state that these revised rules "supercede all current regulations for operator licenses." A comparative review of outdated Appendix A of 10 CFR 55 against 10 CFR 55.59 confirmed that the format and content of 55.59 is largely consistent with the requirements previously provided by Appendix A. While some minor wording and content changes occurred, the information incorporated into 10 CFR 55.59 did not

include any substantive changes from the information previously provided by Appendix A to 10 CFR 55. As such, the deletion does not constitute an Unreviewed Safety Question.

## **USQD No. 98-0150**

### **Description**

UFSAR Section 7.4, "Systems Required For Safe Shutdown," was revised to group all "description" information in Section 7.4.1, "Description," and all "analysis" information in Section 7.4.2, "Analysis." These changes include revising Paragraphs 7.4.2.1.1 and 7.4.2.1.2 to change incorrect statements. The change to 7.4.2.1.1 adds a caveat that cables for redundant pumps may be run in the same fire area, rather than be routed in a separate fire area, if the cables for one train are run in dedicated conduit or are fire-wrapped. The change to 7.4.2.1.2 deletes the statement that fault isolation is "in accordance with Regulatory Guide 1.75." In addition, there are some editorial changes, such as revising names of equipment and changing the paragraph numbering to be consistent with the rest of the UFSAR.

### **Summary of Safety Evaluation**

The change in the wording of 7.4.2.1.1 reflects the installed configuration of cables, which allows cables for redundant pumps, such as the Safety Injection (SI) pumps, Component Cooling Water (CCW) pumps and Charging Pumps, to be run in the same fire zone, since all three of each of the SI pumps, CCW pumps and Charging Pumps are in the same fire zone. For Appendix R Shutdown (SD), CCW Pump A is SD Category A, while CCW Pumps B&C are Category B; and Charging Pump A is SD Category A, while Charging Pumps B&C are Category B. To ensure that a fire in either of these fire zones does not cause loss of both SD Category A and B CCW pumps or Charging Pumps, the cables to the "A" pumps are protected from fire by being fire-wrapped or being run in conduit within the pump rooms. This is acceptable since HBRSEP, Unit No. 2 was built before the separation criteria of RG 1.75 existed. The change in the wording of 7.4.2.1.2 eliminates an incorrect statement, i.e., reference to "electrical isolation being in accordance with RG 1.75." HBRSEP, Unit No. 2 follows the requirements of Institute of Electrical and Electronics Engineers (IEEE) 384, "Standard Criteria for Separation of Class 1E Equipment and Circuits," and allows electrical coordination between upstream breakers/fuses with the downstream devices, as demonstrated for Safety Related circuits in various Electrical Calculations. As such, an Unreviewed Safety Question was determined not to exist.

## **USQD No. 98-0151, Rev. 01**

### **Description**

A pin hole leak of an SW line downstream of SW-740 was repaired using a peening/weld overlay method or by the addition of standard pipe fittings internally coated.

## **Summary of Safety Evaluation**

There are no structural, system capacity, flooding, spraying, or seismic issues which could adversely affect the SW System in performing its design basis functions following the repair of the degraded tee downstream of SW-740. Therefore, an a Unreviewed Safety Question was determined not to exist.

### **USQD No. 98-0153**

#### **Description**

UFSAR Section 3.8.1.3.j was revised to make it agree with Section 6.2.1.1.1.3 with respect to the Containment Vessel (CV) negative pressure value. The internal negative pressure of the CV was identified as having two different values in the UFSAR. Section 3.8.1.3, Load and Loading Conditions, states that loading from an internal negative pressure, is 2 psig. Section 6.2.1.1.1.3, ESF System Impact on Energy Removal and Pressure Reduction, states that the maximum allowable differential pressure loading from an internal negative pressure is 3.0 psig.

## **Summary of Safety Evaluation**

UFSAR Section 3.8.1.3.j, Loads and Loading Combinations, provides the design value to be used for negative pressure (-2 psig). UFSAR Section 6.2.1.1.1.3, "ESF Systems Impact on Energy Removal and Pressure Reduction," describes the impact that inadvertent initiation of containment spray flow would have on containment pressure. The maximum allowable differential pressure loading from an internal negative pressure of 3.0 psig is derived by multiplying the design value of 2 psig by a load factor of 1.5 (from Final Facility Description and Safety Analysis Report (FFDSAR) section 5.1.2.4, "Load Combinations," and UFSAR section 3.8.1.3.2, "Load Combinations"). The revision to section 3.8.1.3.j is consistent with previous response provided to the Atomic Energy Commission (AEC) during initial licensing. As such, an Unreviewed Safety Question was determined not to exist.

### **USQD No. 98-0154**

#### **Description**

UFSAR Chapter 12 was revised to reflect radiation control personnel and responsibilities based on the latest CP&L organizational structure. The listed decontamination areas were revised based on plant configuration or need. Section 12.5.3.1.1.1 was revised to indicate Thermoluminescent Dosimeter (TLD) badges issued to individuals remain in the custody of the individual (i.e. taken home). The adjective "portable" was removed from "portable air monitors."

### **Summary of Safety Evaluation**

The organizational changes have no impact on the organization's ability to assure that CP&L's health physics program are being carried out in an effective manner. The changes to the list of decontamination areas are based on plant configuration or need. These changes provide continued assurance that decontamination needs are met and the activity is properly controlled. Changes to the TLD program that require personnel that are issued TLD badges to maintain custody in order to eliminate the need to issue and retrieve badges at each entrance/exit location and allow all individuals with unescorted access to keep their badge with them when departing the site is consistent with an approved exemption to 10 CFR 73.55(d) granted for HBRSEP, Unit No. 2. Other Chapter 12 changes were purely editorial. As such, an Unreviewed Safety Question was determined not to exist.

### **USQD No. 98-0155, Rev. 01**

#### **Description**

The 230KV Switchyard was expanded by adding a new line termination in a new breaker bay West of the existing breaker bays. The new line has two new 230KV gas circuit breakers to be labeled "52-13" and "52-14" and is connected to the existing North and South 230KV Busses in the Switchyard. The Switchyard and these busses were extended approximately 60 feet. Plant facilities presently in the area of the Switchyard extension were removed or relocated. Public Address (PA) equipment located along the existing Switchyard fence was relocated with no loss of PA functions in this area.

### **Summary of Safety Evaluation**

The project to expand the switchyard strengthens the switchyard so that its reliability is increased. Therefore, the probabilities or consequences of accidents/malfunctions/etc., due to the switchyard activities, should be reduced. As such, an Unreviewed Safety Question was determined not to exist.

### **USQD No. 98-0156**

#### **Description**

The Training and Qualification Plan was revised to change the handgun qualification course and the definition of "every 12 months." The revised course meets the requirements of 10 CFR 73, Appendix B. The definition of "every 12 months" is consistent with guidance received from the NRC in correspondence dated August 28, 1990. The changes do not reduce the effectiveness of the approved Training and Qualification Plan.

## **Summary of Safety Evaluation**

The changes do not involve a change in a commitment made to the NRC which is suitable for submittal under the provisions of 10 CFR 50.54(p). The changes do not decrease the overall level of protection required by 10 CFR 73.55 paragraphs (b) through (h) to provide high assurance of protection against radiological sabotage as defined by the design basis threat described in 10 CFR 73.1(a). Therefore, an Unreviewed Safety Question was determined not to exist.

## **USQD No. 98-0158**

### **Description**

The operating configuration of several of the manual containment isolation valves were changed from normally closed to locked closed. These valves are part of Operations Surveillance Test (OST) 944, "Manual Isolation Valve Verification For Valves Outside Containment Vessel," which is required to support Technical Specification (TS) Surveillance Requirement (SR) 3.6.3.2. Locking these valves closed, removes the requirement to verify closure monthly resulting in significant dose savings. Also, several Test, Drain and Vent valves were removed from the OST after being evaluated as part of the containment boundary but not containment isolation valves. An engineering evaluation concluded that there were no TS or other committed requirements for those vents, drains, and test connection valves to be locked close. However, the valves will be locked closed to enhance administrative control. Several other valves were removed from OST-944 surveillance requirements without locking devices after an evaluation concluded they were not within the scope of TS SR 3.6.3.2 requirements since they do not provide a containment isolation or boundary function.

### **Summary of Safety Evaluation**

Locking manual containment isolation valves in the closed position is considered a more conservative approach to ensure containment isolation in the event of a Design Basis Accident (DBA). This adds an administrative control which decreases the probability of the valve being inadvertently mispositioned during normal operation. The valves being locked closed are not accident initiators, but rather part of the mitigation strategy. The system's operation is not impacted as a result of this change. Consequently there is no change in the radiological consequences of an accident previously evaluated in the UFSAR. The manual containment isolation valves are passive devices and as such fail in their operating state at DBA initiation. The locking of the normally closed valves does not change the function or failure modes and effects of these valves. As such, an Unreviewed Safety Question was determined not to exist.

United States Nuclear Regulatory Commission

Attachment to Serial: RNP-RA/00-0048

Page 27 of 72

**USQD No. 98-0159**

**Description**

The UFSAR was revised to change the stated value for copper and nickel in the upper and lower circumferential welds of the reactor vessel. Editorial changes were made to correct grammar and syntax. Wording was added to explicitly point to references that are currently in the UFSAR.

**Summary of Safety Evaluation**

The changes to the copper and nickel content in the upper and lower circumferential welds of the reactor vessel reflect the materials "best estimate chemistry." Changes assure that the reactor vessel integrity is sufficient to resist a pressurized thermal shock event and assure that the material toughness remains within the NRC screening criteria for Pressurized Thermal Shock (PTS) and fracture toughness meets the requirements of 10 CFR 50 Appendix G and the ASME code. The vessel integrity is sufficient that the vessel will not be involved in increasing the probability or consequences of an accident, and no new or different accident or failure is possible. Since the material properties remain within the NRC PTS screening criteria and meet 10 CFR 50 Appendix G, the margin of safety is preserved. As such, an Unreviewed Safety Question was determined not to exist.

**USQD No. 98-0160**

**Description**

Minor corrections regarding the communications system were made to the UFSAR. The Emergency Communications matrix was deleted. This matrix provided comparable information regarding the communications system to that already provided in the Emergency Plan. The Emergency Plan is incorporated into the UFSAR.

**Summary of Safety Evaluation**

The communications systems involved do not interface with any plant equipment that can initiate an accident and do not interact with equipment important to safety. The accidents analyzed in the UFSAR do not credit communications systems for accident mitigation. Corrections to communication system descriptions do not involve equipment that can initiate accidents. Communication systems are not addressed in the basis of any Technical Specification. Therefore, a determination was made that an Unreviewed Safety Question does not exist.

## **USQD No. 98-0161**

### **Description**

The Steam Generator Blowdown Sample Heat Exchanger was replaced with a heat exchanger that deviated from original plant equipment. Variances from the original plant equipment are the whole heat exchanger was manufactured in accordance with ASME B&PV Code Section VIII (1996) instead of Tubes - Section III (1968) and Shell - Section VIII (1968), the material of the pipe fittings on the shell changed from A-181 to A-105, and the hydrotest on the shell was done for a pressure rating of 150 psi rather than 250 psi. UFSAR Table 3.2.2-4 was revised to reflect this change.

### **Summary of Safety Evaluation**

The only safety function of this heat exchanger is to serve as a pressure boundary for the Component Cooling Water System. The failure of the CCW boundary plays no initiating role in any analyzed nuclear accident. The new heat exchanger looks and functions like its predecessor. There is no negative effect on the CCW System or any nearby equipment. No new malfunction is introduced due to the close similarity between the old and new heat exchanger. There are not margins of safety associated with the heat exchanger in Technical Specifications. As such, an Unreviewed Safety Question was determined not to exist.

## **USQD No. 98-0162**

### **Description**

A modification was implemented to prevent (i.e., lock-out) excessive cycling of equipment due to undervoltage conditions on Emergency Busses E1 and/or E2 concurrent with an Emergency Diesel Generator (EDG) failure to start. In addition, Service Water Pump Motors B and D are auto-started on a Loss of Off-Site Power (LOOP) condition. UFSAR Figure 7.2.1-30 was revised to reflect the change.

### **Summary of Safety Evaluation**

The undervoltage lock-out relays prevent excessive cycling of safety related equipment when electrical power is not available to support equipment operation. In addition, the lock-out relays reduce station battery electrical loading by blocking power requirements for equipment not capable of functioning during periods of unavailable power. Service Water Pump Motors B and D are auto-started upon a LOOP condition. With the potential of only having one service water pump (A or C) providing service water to both EDGs, there is marginal service water capacity. The additional auto-start of Service Water Pump Motors B and D provide additional service water capacity during a LOOP condition.

These changes enhance system/component operation and ensure design basis functions are completed. As such, an Unreviewed Safety Question was determined not to exist.

### **USQD No. 98-0165**

#### **Description**

A modification was implemented to disconnect the hotwell high level alarm in order to prevent nuisance alarms in the control room.

#### **Summary of Safety Evaluation**

The alarm performs no automatic function. The disabling of the alarm does not challenge any safety system. Level indication remains available and Operations continues to have control of hotwell level. Therefore, an Unreviewed Safety Question was determined not to exist.

### **USQD No. 98-0167**

#### **Description**

UFSAR Section 6.2.5 was revised to indicate that the text of Section 6.2.5.3 is information only reference material. A sentence was added to indicate that the current licensing basis is that hydrogen generation allowed by 10 CFR 50.46 has replaced historical WCAP hydrogen generation as acceptance criteria for the Loss of Coolant Accident (LOCA) accident. A sentence was added to indicate that the referenced WCAP "design case" yields a hydrogen generation result that conservatively bounds current fuel design allowable hydrogen generation, even though the mass of Zircaloy in the fuel assemblies has been increased since the WCAP was implemented. This UFSAR update also identifies the system operation and WCAP analyses descriptions of the Post Accident Containment Ventilation System (PACVS) to be of historical interest, since the 10 CFR 50.44 requirements for combustible gas control have led Robinson Nuclear Plant (RNP) to implement a hydrogen recombiner system to be used instead of the PACVS.

#### **Summary of Safety Evaluation**

The operation of either combustible gas control system is dependent upon an accident having taken place, therefore, operation of either system does not make any accident precursors more likely, since the postulated event has already occurred. The consequences of accidents (LOCA and possibly Fuel Handling Accident (FHA)) are not affected by the clarification in the UFSAR that the LOCA/FHA analyses of record implement regulatory required criteria that are more stringent than the WCAP analyses performed in about 1970. The UFSAR clarification does not introduce any new equipment or modes of operating the existing equipment that are not already evaluated in the UFSAR. The change does not introduce any change to the analyses of record currently in place. Therefore, there is no reduction in the margin of safety identified in the Bases of any Technical Specification. As such, an Unreviewed Safety Question was determined not to exist.

### **USQD No. 98-0168**

#### **Description**

An engineering evaluation was revised to evaluate the existing coarse screen assemblies for the Reactor Coolant Pump (RCP) Bay for permanent acceptance. The existing screen frames are constructed of carbon steel and are considered a "component" of the Emergency Core Cooling System (ECCS). UFSAR section 6.1.1.1.1 states in part that ECCS "components are constructed of austenitic stainless steel or an equivalent corrosion resistant material". As such, the frames are inconsistent with the UFSAR statement. During Refueling Outage (RO)-18 the screen frames were examined by the Civil/Coatings Engineer. The examination concluded that the current condition of the frames did not warrant their replacement. The original evaluation concluded that the condition was acceptable for at least two operating cycles. Also that, as previously evaluated, the anticipated accident conditions will not adversely impact the structural capability. Thus, the coarse screen performance capability to mitigate the consequences of a design basis accident are unchanged. UFSAR section 6.1.1.1.1 was revised to depict the coarse screen carbon steel frames.

#### **Summary of Safety Evaluation**

The conclusion is that this change does not result in an Unreviewed Safety Question. This is based on the evaluation of the coarse screen carbon steel frames that determined that while the frames are not constructed of corrosion resistant materials, the anticipated corrosion rate during normal plant operation and accident condition will not adversely impact the structural integrity of the component. This is further enhanced by procedural examination of the screen assemblies on an 18 month interval. The capability of the coarse screens to perform their design function is unchanged.

### **USQD No. 98-0169**

#### **Description**

A modification was implemented to provide compensatory action for a degraded condition that existed on the low level alarm on the Lower Oil Reservoir Level Detector of RCP-A. The modification bypassed the RCP-A lower oil reservoir low level alarm by installing a jumper across the contacts of the low level switch LC-419 mounted on RCP-A motor. This jumper cleared the locked in alarm and restored the functions of the other three alarms annunciated by Annunciator Panel Procedure (APP) 001-D8.

#### **Summary of Safety Evaluation**

The modification provides a compensatory action for a degraded condition that existed on the low level alarm on the Lower Oil Reservoir Level Detector LC-419. The change was in accordance with Generic Letter 91-18, "Information to Licensees Regarding NRC Inspection Manual Section on Resolution of Degraded and Nonconforming Conditions," and restored three

alarms associated with the Upper and Lower Oil Reservoir Level Detectors LC-417 and LC-419 that were inhibited by a degraded condition in the SSC. There are other pump parameters available in the Control Room to monitor this pump such as vibration, motor bearing temperature, motor current and CCW Heat Exchanger (HX) outlet temperature. Loss of lubrication to the lower bearing could lead to Reactor Coolant Pump shaft seizure and shaft break. The probability of occurrence of loss of oil to the upper bearing is not increased by this activity. The consequences of loss of oil in the upper pump motor bearing include shaft break or seizure. The consequences of either of these failures as described in SAR Chapter 15 are not increased. As such, an Unreviewed Safety Question was determined not to exist.

#### **USQD No. 98-0172**

##### **Description**

The battery cells in Station Battery B (SBB) were replaced with larger, higher capacity cells, which required a larger, seismically qualified support rack. The associated calculations and procedures were changed to conform to the specific requirements of the new cells.

##### **Summary of Safety Evaluation**

Only the capacity of the battery and the size of the rack were physically changed in the plant. All other changes were to the supporting documentation and calculations. The effect of a higher capacity battery is a higher short circuit current and the existing busses. MCC-B, and related circuits have been evaluated as capable of handling the larger current. All other impacts are positive, most notably an increased design margin for battery capacity and a reduced fire loading in the battery room. As such, an Unreviewed Safety Question was determined not to exist.

#### **USQD No. 98-0174**

##### **Description**

New gearing was installed within the actuators for valves FW-V2-6A&C, RHR-752A&B, and SI-863B. New motors were also installed on valves FW-V2-6A&C and transferred to 480V power supplies. The purpose of these changes was to provide increased thrust/torque margin. The valve disk for valves MS-V1-8A, B&C were modified to eliminate the potential for pressure locking.

##### **Summary of Safety Evaluation**

The modifications enhance the Motor Operated Valve (MOV) margin of operability by ensuring that the affected valves have adequate torque/thrust to function under design basis conditions. The change in stroke times resulting from this modification decrease the margin of operability with respect to the valves' safety function to operate within the analyzed 3 minute time limit for switch over from injection phase to recirculation phase, as reported to the NRC via CP&L Letter

dated October 16, 1997. An engineering evaluation and another USQD (USQD 98-0179) evaluated and approved a change in switch over time from 3 minutes to 10 minutes, which eliminated the concern of increased stroke times.

Replacement parts were qualified as necessary for the application, and were provided by qualified vendors. Implementation of the modifications will not affect previously analyzed accidents or equipment malfunctions, and will not create any new accident scenarios or the possibility of unanalyzed equipment malfunctions. It has therefore been determined that an Unreviewed Safety Question does not exist.

### **USQD No. 98-0175**

#### **Description**

A new permanent debris hood was installed over the existing ECCS sump located inside the Reactor Containment Building to limit the amount of debris that can directly enter from above and minimize the "vertical zone of influence" which could potentially impact the sump's performance during the design basis ECCS recirculation phase. UFSAR Section 6.3.2.2.2 and Figure 6.3.2-3 were revised to indicate that a hood is located over the sump to deflect debris from falling directly into the baffle wall.

#### **Summary of Safety Evaluation**

The modification enhances the ability of the ECCS sump to perform its design basis function following a LOCA. The ECCS sump function and response to a LOCA remain unchanged as a result of this modification. The hood does not have any impact on the events that initiate accidents. The modification does not impact any of the fission product barriers or reduce the ability of plant systems to mitigate the consequences of an accident. The sump hood increases the effectiveness of the sump in keeping debris out of the RHR/Containment Spray System and actually reduces the possibility of clogging the containment spray nozzles. The sump hood does not create new interfaces or configurations that could lead to an accident involving nuclear safety. As such, an Unreviewed Safety Question was determined not to exist.

### **USQD No. 98-0176**

#### **Description**

Explanatory text was added to the Reactor Coolant Pump (RCP) trip criteria on EPP Foldouts A&C to assist the operator in remembering the intent and basis of the step. New Faulted Steam Generator (SG) Isolation criteria were added to EPP Foldout A. The net effect of this change is to supersede the priorities of the Westinghouse Owners Group (WOG) Emergency Response Guideline (ERGs) with isolation of Auxiliary Feedwater (AFW) to a faulted SG earlier than intended in the ERGs.

### **Summary of Safety Evaluation**

The revision only affects the mitigation strategy of the procedures used to combat events that are under the control of Foldout "A." The actions taken by this change take place after the event has occurred so the probability of occurrence of an accident previously evaluated in the SAR are not affected by this change. The change is made to assure the assumptions of UFSAR Table 15.1.5 are maintained valid in that AFW will be isolated to a faulted SG in 600 seconds or less. The classes of events mitigated and diagnosed by the section covered by the revision to Foldout A were identified (LOCA, Steam Line Break, SGTR) and evaluated. The effect on the consequences of any event were improvements for steam line breaks in either one or two SGs or a negligible impact on non steam line break events. The change only impacts the mitigation strategy for large scale events and does not alter the method of operation of any component, nor does it attempt to mitigate equipment malfunctions. This change only isolates AFW flow to a faulted SG prior to the time directed by the ERGs. Therefore, an Unreviewed Safety Question was determined not to exist.

### **USQD No. 98-0177**

#### **Description**

A Temporary Modification was implemented to provide an alternate flow-path for the discharge of the containment (CV) Sump Pumps A & B. The end point continues to be the Waste Hold Up Tank (WHUT).

#### **Summary of Safety Evaluation**

An alternate discharge path from the CV Sump Pumps to the WHUT was established due to the potential for blockage of the normal discharge line. All work was performed inside containment and isolation capability of both containment penetrations was not impacted by the temporary modification. A Special Procedure was used to provide guidance for operating the alternate flow path. The temporary installation had no practical effect on the integrity of permanently installed equipment. The effect of the failure of the hose during liquid transfer is bounded by DBA qualification of the equipment important to safety. An Unreviewed Safety Question was determined not to exist.

### **USQD No. 98-0179**

#### **Description**

During the switchover from the injection phase to the recirculation phase of a Small Break LOCA (SBLOCA) the RHR pump is aligned to take suction from the Containment Sump and discharge to the suction header for the High Head Safety Injection (HHSI) pump(s) and Containment Spray pump(s). The HHSI pump takes suction from this header and discharges to the RCS to provide long term cooling flow to the core. During the performance of the above

alignment (also known as the "piggyback alignment") there is a period of time in which there is no Safety Injection flow to the core. This period of "no SI flow" has been part of the licensing basis for the plant since the 1975 ECCS Reevaluation for compliance with 10 CFR 50 Appendix K criteria. The proposed activity evaluates the extension of the "no SI flow" time from 3 minutes to 10 minutes. This activity also updates the UFSAR to clarify the switchover process (Sections 6.2.2.2.1 and 6.3.2.2.5) and to include a description of the plant response during the switchover to the piggyback alignment as well as a description of the methodology and assumptions used in the analysis (UFSAR Section 15.6.2).

### **Summary of Safety Evaluation**

The engineering evaluation reflects a 10 minute period of no SI flow during switchover to the "piggyback alignment" following a SBLOCA. The method for performing the switchover of the ECCS from the injection alignment to the recirculation alignment for a SBLOCA is consistent with the description/evaluation contained in UFSAR Sections 6.2.2.1 and 6.3.2.2.5 and other licensing basis documents. No new equipment or Operator actions are required to perform the switchover from injection to recirculation. The plant and equipment operating conditions are consistent with those normally seen during a LOCA. The methodology used to evaluate the plant response was approved by the NRC for use in performing 10 CFR 50 Appendix K analyses. Very conservative analysis assumptions were used to ensure that bounding Peak Clad Temperature (PCT) and clad oxidation values were calculated. The plant response predicted by the analysis and incorporated into UFSAR Section 15.6.2 show that all of the 10 CFR 50 Appendix K criteria are met including long term cooling. Therefore, an Unreviewed Safety Question was determined not to exist.

### **USQD No. 98-0180**

#### **Description**

An engineering evaluation was performed to demonstrate that operation of the Chemical and Volume Control System (CVCS) with a through-weld leak of approximately 0.0011 gpm had no impact on the CVCS capability to limit dilution.

### **Summary of Safety Evaluation**

Operation of the CVCS with a through-weld leak calculated to be approximately 0.0011 gpm was determined to have no impact on the CVCS capability to limit dilution as more than adequate pump performance continues to exist. Operator actions, assumed as part of the Chapter 15 accident analyses, remained unaffected by operation of the CVCS with a through-weld leak of this magnitude. The evaluation from both a system function and structural respect is that the system was operable. The function, modes of operation, and failure modes remain the same. There is no impact on the CVCS system operation. There are no negative seismic concerns. Procedural and operator responses remain the same. Therefore, an Unreviewed Safety Question was determined not to exist.

**USQD No. 98-0181**

**Description**

A 10 CFR 50 Appendix J, and Technical Specification (TS) 3.6.8 on line valve leakage test was performed due to maintenance on valve that could affect performance.

**Summary of Safety Evaluation**

The test replicates the requirements that are invoked for containment isolation valves in TS 3.6.3 and for Isolation Valve Seal Water (IVSW) in TS 3.6.8. Containment integrity is maintained at the level described in the SAR by failing close valve WD-1728. The inoperability of IVSW is controlled by an action statement, and the total IVSW Header leakage is evaluated against the Technical Specification surveillance requirement. As such, an Unreviewed Safety Question was determined not to exist.

**USQD No. 98-0182**

**Description**

A leakage test on a valve was performed to meet the requirements of a qualified seal system in 10 CFR 50 Appendix J, and Technical Specification (TS) 3.6.8 due to maintenance performed on valve that could affect its performance.

**Summary of Safety Evaluation**

The test replicates the requirements that are invoked for containment isolation valves in TS 3.6.3 and for Isolation Valve Seal Water (IVSW) in TS 3.6.8. Containment integrity is maintained at the level described in the SAR by failing close WD-1723. The inoperability of IVSW is controlled by an action statement, and the total IVSW Header leakage is evaluated against the Technical Specification surveillance requirement (SR 3.6.8.6.c). As such, an Unreviewed Safety Question was determined not to exist.

**USQD No. 99-0001**

**Description**

The UFSAR was revised to reflect an Engineering organizational change that transferred functions, responsibilities, and personnel from the "NED" to site "RES" engineering organization for the Design Control Unit (DUC).

### **Summary of Safety Evaluation**

This administrative change to the UFSAR, had no effect on UFSAR and TS Bases assumptions. Necessary activities and responsibilities were properly assumed by the RES engineering organization. As such, an Unreviewed Safety Question was determined not to exist.

### **USQD No. 99-0002**

#### **Description**

A temporary modification was implemented to inject a sealant material through a hole drilled in the drain cap for the Steam Generator C Secondary Side Drain which was leaking by the seat, and the associated drain cap.

#### **Summary of Safety Evaluation**

Implementation of this modification did not alter the function of the components, it only ensured leak tightness and thereby reduced the likelihood of degraded system conditions in an accident scenario. Use of this particular process to eliminate leaks is an accepted industry practice and is allowed/provided for in existing plant procedures. It was therefore concluded that implementation of this modification did not create an Unreviewed Safety Question.

### **USQD No. 99-0008**

#### **Description**

UFSAR Section 15.1.5 was revised to reinstated a table which was inadvertently deleted due to a clerical error during the processing of Revision 13 to the UFSAR. The table contained details of the primary and secondary side isotopic coolant activity assumed in the Main Steam Line Break (MSLB) dose assessment presented in that section.

#### **Summary of Safety Evaluation**

The change restores the level of detail to the presentation of the MSLB dose assessment that had existed since the original FSAR submittal and Safety Evaluation Report (SER) approval. The information presented in the reinserted table was originally presented and approved in the original FSAR. The dose assessment has remained intact and endorsed by subsequent SER's and UFSAR changes. This table also remains consistent/compatible with Technical Specifications 3.4.16, "RCS Specific Activity," and 3.7.15, "Secondary Specific Activity" (and their associated Bases), the corresponding information in UFSAR Table 11.1.1-2, and the leakage rates presented in the UFSAR text on page 15.1.5-6. The change simply restores the level of detail presented in support of the original MSLB dose assessment and all of the inputs, assumptions, methods, and results of the MSLB dose assessment remain intact since the FFDSAR submittal,. As such, an Unreviewed Safety Question was determined not to exist.

## **USQD No. 99-0009**

### **Description**

Nitrogen was injected into the RCS during draindown to displace the water contained in the Steam Generator (SG) tubes via the RCS flow measurement high pressure instrumentation tubing (cold leg elbow) and by use of nitrogen bottles (to control volume) located on the second level of the containment building outside the missile shield.

### **Summary of Safety Evaluation**

Constraints associated with injection of nitrogen into the RCS to facilitate draindown by displacing the water in the SG tubes were evaluated and established. Nitrogen is to be injected only after decay heat removal is accomplished by RHR and SGs are not required. Injection of nitrogen adds no water to RCS and volume displaced in the tubing is not sufficient to be of concern relative to dilution. The possibility of RCS inventory reduction/loss is minimized due to elevation of nitrogen bottles, tubing and injection point (2nd level containment) being higher than the vessel flange. The volume of nitrogen to be injected is limited to that which would displace the volume of the SG tubes and a portion of the channel head. To initiate the RCS drain, the pressurizer PORVs are procedurally blocked open and RCS vents are opened. Injection of nitrogen into the RCS is controlled by limiting volume and procedure prerequisites such that shutdown cooling is not adversely impacted. No dose increase of any previously evaluated will occur. As such, an Unreviewed Safety Question was determined not to exist.

## **USQD No. 99-0010**

### **Description**

Operations Management Procedure (OMP) 003, "Shutdown Safety Function Guidelines," was revised per comments from users and to address recent Condition Reports (CRs).

### **Summary of Safety Evaluation**

The revision does not alter plant design or equipment operation and therefore does not increase the likelihood of a previously evaluated accident. OMP-003 provides guidance for management and Operations personnel. The guidelines are not used to operate or configure plant equipment differently than described in the SAR, therefore the probability or consequences of evaluated malfunctions are unchanged and no unique accident scenarios are created. The OMP continues to maintain the margin of safety as defined in the Technical Specification Bases and SAR by ensuring outage nuclear safety via equipment availability and appropriate administrative controls. As such, an Unreviewed Safety Question was determined not to exist.

## **USQD No. 99-0012**

### **Description**

The evaluation performed for Cycle 19 operation with less than 16 Diffuser Adapter Cap Screws (DACS) in Reactor Coolant Pump (RCP) C was expanded to include Cycle 20 operation.

### **Summary of Safety Evaluation**

RCP C in its current configuration is fully capable of performing its design function under both normal and accident conditions. The loose parts created by the 4 missing or partially missing DACS and locking cups are not capable of initiating any accidents or malfunctions of equipment important to safety evaluated in the SAR or creating any new accidents or malfunctions of equipment important to safety. The margin of safety is provided by conservatism's utilized in the safety analyses in conjunction with the accident analysis acceptance criteria. Additional margin is provided by the engineering design factors that go into the consideration during the design, manufacturing, and assembly phase of equipment and components important to safety. The evaluation does not reveal any decrease in the performance of equipment important to safety. As such, an Unreviewed Safety Question was determined not to exist.

## **USQD No. 99-0013**

### **Description**

The Bases to Table 3.3.2-1, Function 5a, "Feedwater Isolation," are corrected to agree with Applicability as stated in the Specification. The Bases to LCO 3.3.7, "Control Room Emergency Filtration System (CREFS) Actuation Instrumentation," LCO 3.7.9, "Control Room Emergency Filtration System (CREFS)," LCO 3.7.10, "Control Room Emergency Air Temperature Control (CREATC)," LCO 3.8.2, "AC Sources - Shutdown," LCO 3.8.5, "DC Sources - Shutdown," LCO 3.8.8, "AC Instrument Bus Sources - Shutdown," and LCO 3.8.10, "Distribution Systems - Shutdown," are clarified with respect to the applicability to movement of irradiated fuel. The Bases to LCO 3.4.17, "Chemical and Volume Control System (CVCS)," are editorially changed in the background description. The Bases to LCO 3.7.4, "Auxiliary Feedwater," are clarified to describe inoperability of pumps and flow paths in the ACTIONS. The Bases to LCO 3.7.11, "Fuel Handling Air Cleanup System (FBACS)," are modified to reflect NRC approval of an Unreviewed Safety Question. The Bases to LCO 3.9.6., "Refueling Cavity Water Level" are corrected in the references.

### **Summary of Safety Evaluation**

Miscellaneous Changes, Corrections and Improvements to the Technical Specifications Bases were made for consistency with NRC approved licensing actions by letters dated October 24, 1997, and January 27, 1998. The Bases changes enhance and correct descriptions and explanations of Technical Specification requirements which are not changed. The Bases changes comply with the Technical Specifications and do not result in changes to design, construction,

United States Nuclear Regulatory Commission

Attachment to Serial: RNP-RA/00-0048

Page 39 of 72

operation or testing of Structures, Systems, or Components. The evaluation finds that the changes to the Bases do not pose an Unreviewed Safety Question.

**USQD No. 99-0014**

**Description**

An engineering evaluation was performed to establish minimum acceptance criteria to ensure leak tight integrity of the Containment Vessel (CV) liner is not compromised under all loading conditions and concluded that the design allowables were less than the nominal thickness that were utilized to procure the material. This was the potential inconsistency conservatively evaluated via this USQD.

**Summary of Safety Evaluation**

The engineering evaluation provided the acceptance criteria for the minimum allowable thickness of the CV Liner under all design conditions for the three thicknesses of the CV Liner and provided the technical basis to support inspections of the CV Liner performed during Refueling Outage (RO)-19. The technical basis was reviewed for impact against the various design and loading conditions that the CV Liner must be able to accommodate to perform its safety related function of providing a leak tight boundary for containment. The evaluation provides acceptance criteria for the CV liner, a passive component that is not considered equipment. The criteria does not interface or impact any other active components, equipment or systems. The CV liner will function as intended in DBA and all conditions to provide an acceptable and predictable environment for equipment important to safety. As such, an Unreviewed Safety Question was determined not to exist.

**USQD No. 99-0016**

**Description**

A new Reactor Pressure Vessel (RPV) Cavity Seal was installed for the purpose of filling the cavity and moving fuel. The new cavity seal uses a mechanical interaction to establish a seal rather than the pneumatic design that had been used. The new cavity seal will continue to maintain water level in the Cavity as required by Technical Specifications during refueling evolutions.

**Summary of Safety Evaluation**

The fuel handling accident is the only accident relevant to the RPV Cavity Seal. The cavity seal does not contribute to the dropping of the fuel assembly, therefore, the design, use of and transport of the cavity seal within containment does not increase the probability of an accident previously evaluated in the SAR. The design of the carrying box includes sufficient safety factors to eliminate it as a risk for a heavy load handling accident. Therefore, the consequences

United States Nuclear Regulatory Commission

Attachment to Serial: RNP-RA/00-0048

Page 40 of 72

of an accident previously evaluated in the SAR are not increased. The RPV cavity seal is seismically qualified and on the Q-list. The cavity seal is evaluated to withstand a seismic and a fuel handling event (dropped fuel assembly). No new failure scenarios will be created by the use of the cavity seal or due to the transport or storage of the carrying box with the cavity seal. Since the use of the new RPV cavity seal does not alter the current Limiting Conditions for Operations (LCOs) or required actions as well as assumptions in the Chapter 15 design basis accidents, the margin of safety is not reduced while the RPV cavity seal is used. As such, an Unreviewed Safety Question was determined not to exist.

**USQD No. 99-0019**

**Description**

Adjustable rigid struts were temporarily installed in place of the existing shock suppressers (snubber) for each of the steam generators during RO-19.

**Summary of Safety Evaluation**

The temporary installation of the adjustable rigid struts provided the same function as the existing snubbers during MODES 5, 6, and defueled except for provisions that require manual adjustments due to thermal movements. The struts were designed and fabricated to meet design requirements for safety related component seismic restraints. The rigid struts were designed and installed to ensure that their design function of protecting the RCS boundary during a seismic event during MODES 5 and 6 are satisfied. The adjustable rigid struts perform the same function as the existing snubbers and therefore do not create new interfaces or configurations that could lead to an accident of a different type. Based upon the fabrication, design and installation requirements of the temporary rigid struts, an Unreviewed Safety Question was determined not to exist.

**USQD No. 99-0021**

**Description**

Fire Protection (FP) 012, "Fire Protection Systems Minimum Equipment And Compensatory Actions," which is part of the Fire Protection Administrative Controls broadly addressed in the UFSAR that were added to allow removal of Fire Protection requirements from the Technical Specifications, was revised. Changes to the procedure included editorial changes; formatting changes in accordance with the Writer's Style Guide format; changes to make the procedure more user friendly, uniform wording of repetitive phrases to provide consistency throughout document; clarification of requirements; and incorporating guidance from past lessons learned. None of these changes are considered to represent changes to the program as described in the SAR. Changes to the procedure which do represent changes the program as described in the SAR include: adding guidance to aid Fire Protection Staff in decision making; adding new requirements where needed to ensure consistency in Program implementation between Sections

having similar actions; providing new requirement statements to spell-out previous implied statements; and adding new requirements. These added requirements support the present Fire Protection positions taken on the control of Fire Protection Program, the minimum fire protection systems required to be operable and the compensatory actions to be taken when these systems becomes inoperable.

### **Summary of Safety Evaluation**

No new fire accident scenarios are being introduced by the changes. The margin of safety has not been decreased. Alternate shutdown methods which have been provided to ensure safe shutdown occurs remain unchanged. Active and passive fire protection features provided throughout the plant remain unchanged and will continue to perform their intended function. The changes increase the present compensatory action requirements for the loss of certain systems, increase decision making concerning fire protection system inoperabilities, ensure consistency in Program implementation of required actions for certain system inoperabilities, remove implied requirements for return to service and conditions for operability, and add new equipment to be controlled under the procedure. The minimum fire protection systems required to be operable and the compensatory actions to be taken when these systems become inoperable have not been decreased. As such, an Unreviewed Safety Question was determined not to exist.

### **USQD No. 99-0023**

#### **Description**

The UFSAR was revised to correct errors found during self assessments. Figure 8.3.1-4 was revised to include missing information and to correct other information presented. Paragraph 8.3.1.1.5.3 has been revised to correctly describe the automatic loading sequence of the emergency diesel generator during an undervoltage condition on the 480 volt emergency bus E1 without a concurrent Safety Injection (SI) signal.

### **Summary of Safety Evaluation**

The changes are an enhancement to the UFSAR to clarify the actual plant configuration and to add missing information. These UFSAR changes are administrative enhancements to correctly described the facility as presently designed and installed. The changes do not impact the design function of any system and as such do not constitute an Unreviewed Safety Question.

### **USQD No. 99-0025**

#### **Description**

A section was added to an Operations procedure to provide the flexibility to use the CVCS anion bed demineralizer to help cleanup the RCS.

### **Summary of Safety Evaluation**

The anion demineralization beds in the CVCS are installed plant equipment that has been used under specific conditions (deboration of the RCS at the end of core life). There were no physical changes made to these demineralization beds. The conditions of their use is the only change. Controls established for use of the deborating demineralizer for additional cleanup capability ensure that the probability or consequences of any accident is not increased. The use of the demineralizers does not have any influence on the malfunction of other equipment important to safety. To prevent an unanalyzed transient, only the 45 gpm letdown orifice is permitted during the initial use of the deborating demineralizer until satisfactory performance has been verified via stable reactor parameters. This limits the resulting charging flow to well below the limiting dilution flow of 230 gpm evaluated in UFSAR Section 15.4.6.3.6. When operated per procedure, the only change will be additional removal of contaminants. The use of the demineralization beds is not directly addressed in the Bases of any Technical Specification. As such, an Unreviewed Safety Question was determined not to exist.

### **USQD No. 99-0026**

#### **Description**

Revised Paragraph 1.6.3 to UFSAR Section 17.3, Appendix A to clarify the qualifications for Plant Nuclear Safety Committee (PNSC) Alternates to state "professional-technical" and to include qualification requirements for Engineering, Regulatory Affairs, Maintenance, and other disciplines represented in the PNSC which do not have any direct correlation with ANSI N18.1-1971, "Selection and Training of Nuclear Power Plant Personnel," Section 4.4. The effect of this change is to provide qualification requirements similar to other disciplines in the PNSC.

#### **Summary of Safety Evaluation**

The change to the UFSAR was found to not affect accident probabilities or consequences, to not affect equipment failure probabilities or consequences, to not involve new accidents or failure modes, or to affect the margin of safety. The change does not constitute an Unreviewed Safety Question.

This change was evaluated as not reducing a commitment to the QA Program, therefore, the change was made without prior NRC approval as allowed by 10 CFR 50.54(a)(3).

### **USQD No. 99-0050**

#### **Description**

Decision capabilities were added to the Robinson Emergency Plan emergency action levels to require verification (by sampling of RCS) of a fuel breach. A condition could exist that would cause R-9 (failed fuel monitor) to increase without fuel damage present.

### **Summary of Safety Evaluation**

The change concerns the diagnosis/assessment of an accident after occurrence so cannot increase the probability of occurrence of an accident. None of the accidents previously evaluated in the SAR indicate verification by RCS sampling for a fuel clad breach would increase the consequences of an accident. Requiring a validation sample does not increase the probability or consequences of an equipment malfunction of any type nor does it cause a reduction to the margin of safety as defined in the Bases for any Technical Specifications. Therefore, an Unreviewed Safety Question was determined not to exist.

### **USQD No. 99-0053**

#### **Description**

Inservice Testing (IST) Program for pumps and valves was revised to clarify the applicability related to later editions of the ASME BP&V Code. The majority of this revision is administrative in that it provides clarifying information, corrects typographical errors, and implements changes required as a result of previous revisions to implementing procedures. These changes ensure continued ASME Code compliance and improve the audibility, understanding, traceability and accuracy of information related to the IST program.

### **Summary of Safety Evaluation**

These changes did not affect the design, construction, operation, installation, failure modes and effects, maintenance, or testing of systems, structures, and components assumed to fail to initiate an accident or equipment malfunction, beyond that which is already allowed by code requirements. These changes did not decrease the ability to mitigate the consequences of an accident or equipment malfunction, or change margins assumed in the design bases or technical specifications. Therefore, an Unreviewed Safety Question was determined not to exist.

### **USQD No.99-0067**

#### **Description**

The UFSAR was revised to further clarify the normal seal water supply flow rate as a follow-on to a previous UFSAR change. Table 9.3.4-1 was revised to clarify that the normal band of flow rate of 24-39 gpm. It previously listed the normal seal water supply flow rate as 24 gpm.

### **Summary of Safety Evaluation**

A review concluded that this change is completely bounded by the Safety Evaluation (USQD 97-0096) reported in the previous reporting period by CP&L letter dated October 14, 1998. This USQD concluded that the changes to the UFSAR did not increase the likelihood of Chapter 15 accidents involving the Chemical and Volume Control System (CVCS) as initiating events. No

changes to initial assumptions for dilution events or release of radioactive gases are required by these changes; therefore the consequences of a previously evaluated accident are not increased. No new accidents are created or equipment added by this change. The change does not reduce the margin of safety as defined in the Bases of any Technical Specification. As such, an Unreviewed Safety Question was determined not to exist.

### **USQD No.99-0077**

#### **Description**

UFSAR Figure 10.1.0-7 was revised to add the 2A and 2B Moisture Separator Reheater (MSR) Drain tanks with the associated level control valves and alarms. Also several editorial changes were made to the figure, primarily associated with equipment labeling.

#### **Summary of Safety Evaluation**

These changes were implemented as a result of a correction action. The changes are not due to any new activity, but rather are enhancements to the UFSAR to show actual configuration of plant equipment. Most changes were editorial, with only a few changes to the description of the physical layout of plant equipment. The corrections to the configuration that are incorporated do not affect any safety related equipment, such as showing the MSR Drain tanks with the associated level control valves and alarms. The editorial changes have no effect on the design or operation of the plant, and therefore cannot cause a concern. As such, an Unreviewed Safety Question was determined not to exist.

### **USQD No. 99-0085**

#### **Description**

Implemented modification to abandon (in place) degraded piping in one portion of the Service Water (SW) System north header was abandoned (in place) and new piping was installed to replace the abandoned piping. The piping replacement if viewed on a P & ID does not change except for the addition of a venturi. Applicable UFSAR Sections were revised accordingly.

#### **Summary of Safety Evaluation**

The new piping configuration has less hydraulic resistance than the existing piping and therefore, cooling remains unaffected by this modification. The safety design basis of the SW System is to provide cooling to the safety related loads. This modification was designed to the same level of quality and safety as the existing design. There was no reduction of either quality, safety or design attributes for this modification and therefore an Unreviewed Safety Question was determined not to exist.

**USQD No. 99-0126**

**Description**

The UFSAR, plant procedures and a system description were revised to reflect the way HBRSEP, Unit No. 2 is operating the Loose Parts Monitoring System (LPMS) in relation to Regulatory Guide 1.133.

**Summary of Safety Evaluation**

The operation of the LPMS is not used in any accident scenario as an initiating event nor as a mitigating factor. A change to the operation of LPMS, specifically in the analysis phase, does not constitute an Unreviewed Safety Question.

**USQD No. 99-0131**

**Description**

Figure UFSAR 9.3.2-1 was revised to reflect a portion of the sample tubing in the primary sampling system connected to the downstream side of PS-973 as opposed to the upstream side for consistency between the flow diagram and field conditions.

**Summary of Safety Evaluation**

This change merely reflects the appropriate tubing connection and does not impact the operation of the system. Updating the flow diagram in this nature is not an activity that would increase the probability of occurrence or consequences of an accident or the probability of occurrence or consequences of a malfunction of equipment important to safety previously evaluated in the SAR. The change would not create the possibility of an accident or equipment malfunction of a different type than any previously evaluated in the SAR. As such, an Unreviewed Safety Question was determined not to exist.

**USQD No. 99-0159, Rev. 01**

**Description**

Changes were made to fire protection procedure FP-003, "Control of Transient Combustibles," that relate only to the control of transient combustibles. Changes to the procedure were made that represent changes to the program as described in the SAR. These include the general update of the procedure; the inclusion of editorial comments; formatting changes into the required Writer's Style Guide format; making the procedure more user friendly; statement of commitment to Appendix R Section III.K; added new alternatives for determining heat content of various materials; and added new forms and guidance to aid in the quarterly audit of the transient combustible tracking logs against plant conditions; allow the requirement to perform quarterly

walkdowns to be waived under certain plant conditions (i.e., refueling outages). A change was made to the procedure that represented a change to the program as described in the SAR in that it changes a commitment to Appendix R Section III.K.8. This change allows the use untreated wooden handled tools in safety-related areas of the plant when not in attendance by workers.

### **Summary of Safety Evaluation**

The changes made to FP-003 do not result in an Unreviewed Safety Question for the following reasons: active and passive fire protection features provided throughout the plant remain unchanged and will continue to perform their intended function; no new fire accident scenarios are being introduced by the changes; the margin of safety has not been decreased; alternate shutdown methods which have been provided to ensure safe shutdown occurs remain unchanged; limitations set forth in the NRC SERs and exemptions have not been exceeded and; no changes were made to plant equipment, configuration or to the facility.

#### **USQD No. 99-0167**

##### **Description**

Required electrical and mechanical equipment/components were evaluated as capable of supporting the operability of the Emergency Diesel Generators (EDGs) at temperatures up to 130°F. Applicable UFSAR Sections were revised accordingly.

### **Summary of Safety Evaluation**

The evaluation concluded that the equipment required to support operability of the EDGs continue to function satisfactorily at temperatures up to 130°F. Since the evaluation did not identify any equipment essential for successful operation of the EDGs that would malfunction at these elevated temperatures, an Unreviewed Safety Question was determined not to exist.

#### **USQD No. 99-0196**

##### **Description**

UFSAR Table 11.5.2-1 was revised to reflect the temperature range of a high temperature detector installed to increase the temperature range of the detecting medium.

### **Summary of Safety Evaluation**

The temperature range of a detector is not used by any scenario as an initiating event nor as a mitigating factor. A change to the temperature range of a detector, specifically to ensure the detector will be able to perform its intended function, does not constitute an Unreviewed Safety Question.

**USQD No. 99-0222, Rev. 01**

**Description**

Erroneous statements implying that an alarm will sound when a safety injection valve is not in the ready position for safety injection was removed from UFSAR Section 6.3.2.

**Summary of Safety Evaluation**

The deletion of the SAR statement has no impact on accident initiation. No operator dependence exists relative to valve position alarm. A valve position alarm is not a consideration of the accident mitigation strategy. The absence of a valve position alarm has no impact on the function or operation of the safety injection equipment. Since this feature does not exist nor is it included in the instrumentation design requirements, the deletion of the erroneous statement does not create an Unreviewed Safety Question.

**USQD No. 99-0234**

**Description**

UFSAR Section 11.2.2.2 and a related drawing were revised to reflect the correct inputs to the Chemical Drain Tank (CDT).

**Summary of Safety Evaluation**

The UFSAR change was made only to reflect the as built plant configuration. The disagreement did not create a Unreviewed Safety Question as each of the overall configurations were reviewed (i.e., original configuration, Post Accident Sample System (PASS) modification configuration and current configuration with the Radiation Control Area (RCA) Entrance Facility). The changes to the inputs to the Chemical Drain Tank (CDT) resulting from a modification were captured in UFSAR Section 9.3.2 and Figure 9.3.2-3 however UFSAR Section 11.2.2.2 was not updated to reflect these changes. The processing of the water from the CDT via the Waste Water Demineralization System is unaffected. This change for consistency with other UFSAR sections and the as built configuration does not create an Unreviewed Safety Question.

**USQD No. 99-0235**

**Description**

Appendix R databases were revised to delete RCP Seal Injection flow indicators and change resolution codes in the Separation Analysis for steam generator (SG) power operated relief valves (PORVs), main steam isolation valve (MSIV) Bypass Valves, & CV Sump Recirculation Valves.

### **Summary of Safety Evaluation**

These changes primarily affect the operation of SG Safety Valves and PORV's and the RHR/Containment Sump Drain Valves for an Appendix R fire. There are no changes in the design or control of equipment; only in the way they are credited for use for Appendix R safe shutdown. This scenario is not considered in Chapter 15 of the SAR. The changes affect the RHR System and Main Steam System, but the changes do not affect the ability of this equipment to operate for an accident or for mitigating the effects of an accident. As such, an Unreviewed Safety Question was determined not to exist.

### **USQD No. 99-0293**

#### **Description**

UFSAR Table 6.2.4-1 notes were added and revised to clarify when penetrations P-24 through P-27 are being isolated.

### **Summary of Safety Evaluation**

The notes that are being changed or added to UFSAR Table 6.2.4-1 clarify when the lines are being isolated. This clarification does not impact any radiological release of the accident since the valve isolation is not being eliminated. The change reflects the need to use these lines to mitigate the consequences of an accident, and to isolate post accident, when the function is no longer required. Isolating the line reduces or eliminates the potential consequences of the accident that has already occurred before this line is isolated. Therefore, the consequences of an accident will not be increased. These lines serve the reactor coolant pumps and the charging pumps. Since this equipment is not operating when the lines are isolated, the function of this equipment is not impacted. Accurately describing when the isolation occurs does not reduce any margin of safety since valve closure in itself provides the required barrier. As such, an Unreviewed Safety Question was determined not to exist.

### **USQD No. 99-0322**

#### **Description**

UFSAR section 11.5.2.2.10 was revised to better reflect the operation of R-21 Fuel Handling Building Upper Level Exhaust Ventilation Radiation Monitor.

### **Summary of Safety Evaluation**

The changes to the UFSAR reflect the actual operation of the plant with the stated operation of the Fuel Handling Building Upper Level Exhaust Ventilation System. This monitor is not used in any accident previously evaluated as a mitigating consideration or as an initiator. This clarification does not effect any equipment and as such cannot increase the probability of the

United States Nuclear Regulatory Commission

Attachment to Serial: RNP-RA/00-0048

Page 49 of 72

occurrence or the consequences of a malfunction. As such, an Unreviewed Safety Question was determined not to exist.

**USQD No. 99-0344**

**Description**

The exclusion of Component Cooling Water (CCW) thermal relief valves from the Inservice Inspection Testing (IST) Program were evaluated as acceptable. UFSAR Section 9.2.2.2.5 and 9.2.2.3.1 were revised to indicate that procedural controls eliminate conditions which may require thermal relief valve actuation.

**Summary of Safety Evaluation**

The failure effects of the CCW thermal relief valves were evaluated. The actuation of the CCW thermal relief valves is not a safety function. Procedural controls eliminate conditions which may require relief valve actuation. Even if actuated, the fluid would return to the system and not be lost. The potential for accidents, consequences of accidents, or malfunctions cannot credibly increase. Exclusion of the valves from the IST program is acceptable. There is no Unreviewed Safety Question.

**USQD No. 99-0349**

**Description**

Operations Management procedure (OMM) 001-2, "Shift Routines and Operating Practices," was revised to allow maintaining control keys at the Work Control Center (WCC) under the control of the WCC Senior Reactor Operator (SRO).

**Summary of Safety Evaluation.**

This revision does not change the method of operation of any component or system. The revision changes the personnel who may administer the administrative controls for controlled keys. This revision will not increase the probability or consequences of a mispositioning event because no components are removed from the "locked position." Since the possibility of a mispositioning event is not increased and the administrative controls for keys are not described in the Technical Specification or their Bases, the margin of safety as defined by the Technical Specification Bases is not reduced. Therefore, an Unreviewed Safety Question was determined not to exist.

### **USQD No. 99-0371**

#### **Description**

A test was performed to determine the setpoint for Moisture Separator Reheater (MSR) Relief Valves using a lift assist device at power with system pressure on the valve.

#### **Summary of Safety Evaluation**

The test causes the valve to lift only a slight amount. When the valve starts to lift, the lifting force is immediately removed and the valve spring shuts the valve. Also , the test device is designed to close the valve, if it does not close on its own. If the valve were to stick and remain partially open, the increase in steam flow would be much less than assumed in UFSAR Chapter 15 analysis (15.1.3). Therefore, the test does not increase the probability or consequences of an accident previously evaluated. The only impact on the plant is a slight increase in total steam flow. An Unreviewed Safety Question was determined not to exist.

### **USQD No. 99-0395**

#### **Description**

The Emergency Plan was revised to update the names of teams, organizations, the local hospital, letters of agreement, and the meteorological tower calibration description. The type of person filling the Technical Analysis Director was changed from a management level to contributor level. Minor organizational responsibilities were changed.

#### **Summary of Safety Evaluation**

These changes to the Emergency Plan did not affect the design, construction, operation, installation, failure modes and effects, maintenance, or testing of systems, structures, and components assumed to fail to initiate an accident or equipment malfunction, or to mitigate the consequences of an accident or equipment malfunction, or assumed as design basis or technical specifications margin. As such, an Unreviewed Safety Question was determined not to exist.

### **USQD No. 99-0405, Rev. 01**

#### **Description**

The Bases to Technical Specification Limiting Condition for Operation (LCO) 3.6.4, "Containment Pressure," was corrected to state: "The containment analysis (Ref. 1) confirms that this calculated peak containment pressure from the limiting LOCA is the same as the  $P_a$  determined in accordance with 10 CFR 50, Appendix J, Option B." Additionally, the initial pressure assumed in the containment response to a LOCA analysis was corrected to 15 psia. The Bases for LCO 3.8.4, "DC Sources - Operating" was revised to state: "Each battery has adequate

storage capacity to carry the required load continuously for at least 1 hour following a plant trip and loss of all AC power (Ref. 2)."

### **Summary of Safety Evaluation**

The Bases changes enhance and correct descriptions and explanations in the Technical Specification Bases and are consistent with the design and licensing basis, and with the analyses information presented in the UFSAR. These Bases changes do not increase the probability or consequences of an accident or equipment malfunction, create a new possibility of an accident or equipment malfunction, or decrease the margin of safety. Therefore, an Unreviewed Safety Question was determined not to exist.

### **USQD No. 99-0409**

#### **Description**

UFSAR Table 9.2.1-2 was revised to correct an incorrect value listed for the required Service Water (SW) system flow needs. The table listed 7648 gpm instead of the correct value of 7733 gpm. The increased capacity is required because of the added 85 gpm needed when the water condensing cooling units were added in a 1990 modification. The correct value was accounted for in other system values specified in the table.

### **Summary of Safety Evaluation**

SW system is not an assumed accident initiator, therefore, the change does not increase the probability of an accident or equipment malfunctions previously evaluated. This change reflects completed design changes that assure mitigation of the consequences of an accident or equipment malfunctions. As such, an Unreviewed Safety Question was determined not to exist.

### **USQD No. 99-0612**

#### **Description**

The UFSAR was revised to remove the discussion of the clarification of the term "Audit" in Regulatory Guide (RG) 1.74, "Quality Assurance Terms and Definitions," and substitute wording to reflect the current commitment to ANSI N45.2.10 and to RG 1.74. This change removes a meaningless phrase about a non-existent clarification and restores the commitment to RG 1.146 to be consistent with the commitment to RG 1.74 and ANSI N45.2.10 as documented in the UFSAR.

## Safety Evaluation

This is an administrative change that clarifies a commitment to regulatory guidance for Quality Assurance program definitions by removing a meaningless phrase. The RG provides no clarification for the term "Audit." This change does not impact any plant equipment, operations or parameters, and thus cannot create an Unreviewed Safety Question.

### **USQD No. 99-0613, Rev. 06**

#### **Description**

A Temporary Modification was implemented to connect a chilled water supply of Deep Well (DW) water to the discharge of the service water booster pump. The cool water will be used as a supplement supply to the Heating and Ventilation Air Handling (HVH) -1, 2, 3, & 4 cooling coils to cool the containment atmosphere. A rental water chiller will be used to cool deep well water which will be pumped to the service water booster pump. The temporary chiller may be used during plant outages or while on-line to cool the containment atmosphere. This modification makes it possible to provide a cooler, safer working environment resulting in fewer accidents, contamination's and improved worker output.

#### **Summary of Safety Evaluation**

The injection of chilled water into the discharge of the service water booster pump will provide cooler water to the HVH unit coolers in the containment, which will lower the containment vessel (CV) ambient temperature. UFSAR Section 9.2.3 states that three DW pumps provide 600 gpm to the Auxiliary Feedwater (AFW) suction. The temporary modification takes one of these pumps out of service. However the other two are capable of providing 600 gpm. The DW pumps are a third tier of defense for AFW suction after the condensate storage tank (CST) and service water. The third deep well pump can be made available for AFW suction within several minutes if needed. The injection of the chilled water into the discharge of the service water booster pump will be connected to an existing flange located outside of the auxiliary building with two check valves located in the permanent connection to provide isolation should the chilled water injection fail. With such safety features as double isolation check valves and the stainless steel perforated screen installed in both the permanent modification and the temporary modification, the margin of safety is not reduced by this activity. Based on the above, an Unreviewed Safety Question was determined not to exist.

### **USQD Number 99-0616**

#### **Description**

TS 3.5.2 Actions B.1, and B.2 Bases were revised to clarify that LCO 3.0.3 entry not required for valves identified in SR 3.5.2.1 and SR 3.5.2.7 when manual isolation of the flow path is assured.

### **Summary of Safety Evaluation**

The use of alternate valves still meet the requirement to isolate the specified flow path thereby ensuring adequate Emergency Core Cooling System (ECCS) flow while providing the flexibility for maintenance and testing. This revision does not change any mode of operation of any component or allow operation of any component or system beyond the envelope provided by the current the Technical Specifications. Therefore, the probability or consequences of an accident previously evaluated in the SAR are not affected by the Bases revision. The change allows credit to be taken for manual valve isolation when control power or air is applied to one of the valves in SR 3.5.2.7 when the valve is opened for maintenance or post maintenance testing. Since the manual valves provide equivalent isolation, and 100% flow equivalent will be available, the margin of safety is not reduced. As such, an Unreviewed Safety Question was determined not to exist.

### **USQD Number 99-0640**

#### **Description**

UFSAR Figure 1.2.2-1 was revised to show the addition of a maintenance fabrication building located north of the Operations & Maintenance building.

### **Summary of Safety Evaluation**

The new building is outside and away from any safety related structures. The electrical power supply is separate from the plant. The building is not connected to systems or equipment used to mitigate an accident nor is it part of the mitigation strategy for any accident. Therefore the addition of the building has no impact on structures, systems, or components evaluated in any accident nor does the change result in the creation of a new accident. There is no Unreviewed Safety Question.

### **USQD Number 99-0688**

#### **Description**

Procedure NUA-NGGC-1510, "Nuclear Assessment Process," was revised to clarify the follow-up requirements for Issues and Weaknesses and add a description of the purpose of the Commitment Matrix.

### **Summary of Safety Evaluation**

This is a procedural change to clarify expectations of the assessment process. These are administrative changes that do not involve a change to plant equipment or how that equipment is operated. Therefore, an Unreviewed Safety Question was determined not to exist.

### **USQD Number 99-0718**

#### **Description**

A piping-valve assembly was installed between the Service Water Booster Pump (SWBP) Suction Cross Connect and header to the Water Cooled Condensing Units (WCCUs) to provide the means to serve the WCCUs with the South Service Water (SW) Header. UFSAR Figure 9.2.1-1 was revised accordingly.

#### **Summary of Safety Evaluation**

The new components for the SWBP Suction Cross Connect to WCCU Supply Header were evaluated considering line size, location, civil/structural/seismic concerns, materials, and installation method, etc. The pipe-valve assembly has the same nominal size as the existing WCCU Supply Header. The selected location does not interfere with existing plant valves or equipment. The safety related assembly are supported for expected and postulated loads, including seismic loads. Selected materials are compatible with the interfacing system piping and system fluid. Care was taken during installation to ensure foreign materials would not affect the system. The change does not increase in probability of occurrence or consequences of an accident, the probability of occurrence or consequences of a malfunction of equipment important to safety, the possibility of an unevaluated accident or unevaluated malfunction, and does not reduced the margin of safety. Therefore, an Unreviewed Safety Question does not exist.

### **USQD Number 99-0731**

#### **Description**

Training Program Procedure TPP-219, "Fire Protection Training Program," which controls the training aspects of the fire protection program, was revised to incorporate various updates and enhancement type changes, clarify requirements and to specify certain minimum performance objectives for the fire brigade and their training.

#### **Summary of Safety Evaluation**

Active and passive fire protection features provided throughout the plant remain unchanged and will continue to perform their intended function. No new fire accident scenarios are being introduced by the proposed changes. The margin of safety has not been decreased. Alternate shutdown methods which have been provided to ensure safe shutdown occurs remain unchanged. Therefore, an Unreviewed Safety Question was determined not to exist.

**USQD Number 99-0737**

**Description**

The inspection procedure for the Crouse Hinds penetration was revised to illustrate the correct end caps during development of a new procedure for containment inspections. UFSAR Figure was also revised to reflect the as built configuration. Electrical penetrations, as illustrated in UFSAR Figure 3.8.1-14, for the Crouse Hinds penetrations were not consistent with the Crouse Hinds design drawing and the as built configuration.

**Summary of Safety Evaluation**

The difference between the as built configuration and the UFSAR Figure was the type of connection. The UFSAR showed a bolted flanged connection inside containment while the design drawing showed a welded end cap inside containment. A review determined that the functional description of the Crouse Hinds penetrations were consistent with the design documents, therefore, the fact that the UFSAR Figure was graphically inconsistent with the design and actual configurations was considered acceptable. The specification for the Crouse Hinds penetrations requires them to withstand a containment pressure of 1.15 times the design pressure. Therefore, any changes in the type of end connections does not increase the probability of occurrence of a design basis accident. The electrical penetration will function during a design basis accident in the same manner. The cables that pass through the penetration are unaffected by the end connection of the penetration and their ability to function is not impacted. The only margin of safety involved with the penetrations is the requirement of Type B and C penetrations to maintain total leakage below the 10 CFR 50, Appendix J requirements. The end connections do no impact the ability of the Crouse Hinds penetrations to maintain the leak tight barrier. Therefore, an Unreviewed Safety Question was determined not to exist.

**USQD Number 99-0765**

**Description**

A new special process procedure (SPP) for taking Instrument Busses (IB) out of service for maintenance during refueling outages in Mode 5 or 6, or with no fuel in containment was approved. The SPP provides compensatory measures for loss of each "pair" of Instrument Busses (IB1 & IB6, etc.).

**Summary of Safety Evaluation**

Only one set of Instrument Busses will be out of service at any one time, and the IB's will not be taken out of service while fuel is being moved. Compensatory actions are provided in the SPP for loss of critical circuits on each IB, so there will be no loss of critical functions due to this SPP. Therefore, this SPP does not adversely impact nuclear safety, and it is not an Unreviewed Safety Question.

## **USQD Number 99-0881**

### **Description**

Changes resulting from the Cycle 20 reload and plant changes as part of the Cycle 20 Plant Parameters Document review were evaluated against the analysis of record. The COLR was revised to incorporate the new Neutronics Methodology and Cycle-20 specific changes.

### **Summary of Safety Evaluation**

This Cycle 20 reload safety analysis evaluates the impact of the Cycle 20 reload on the existing analysis of record as documented in the UFSAR and the Technical Specification and Bases. Changes resulting from the reload and plant changes as part of the Cycle 20 Plant Parameters Document review were evaluated against the analyses of record. As is demonstrated in this evaluation and the associated UFSAR mark-ups, the changes associated with the Cycle 20 Reload are minor. Their impact has been evaluated and demonstrated to be acceptable within the current Robinson licensing basis. The analyses have shown that the licensing basis as defined by the Technical Specifications and Bases, and UFSAR continued to be supported for Cycle 20.

The changes associated with this reload are limited to minor issues which result in minor incremental impact on the operation of the plant. There is no fundamental change to any equipment or operation of the plant that could introduce a new or different type of accident initiator or place the plant in a substantially different configuration from which an accident might be initiated. There are no plant changes that introduce equipment changes that could increase the probability of equipment failure. Since the new fuel design is functionally identical to that used in Cycle 19, the probability of failure due to fuel design itself is not increased. 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 20 operation. Neither the reload nor any plant changes addressed within this evaluation will increase the severity of the operating environment for any equipment or impose additional loads or operating demands on equipment that would increase the probability of failure. As such, an Unreviewed Safety Question was determined not to exist.

## **USQD Number 99-0910**

### **Description**

A modification was implemented to allow the opening and closing of the normal intake dampers, leaving the emergency intake dampers open, and preventing the normal dampers from returning to the open position automatically when a Safety Injection signal is cleared. This USQD specifically addresses the effects of the damper/butterfly valve position on the containment bulk average temperature. USQD 97-0081 addresses other aspects of modification.

### **Summary of Safety Evaluation**

This revision evaluates the effects of the damper/butterfly valve position on the containment bulk average temperature. Solenoids are not an accident initiator and are unrelated to accident probability. The discharge of forced air through the distribution header is unchanged by this configuration since no discharged air flow is redirected by the modification. The bulk average temperature calculation uses temperature stratification assumptions based on measurements taken while the unit was in power operation. These values, coupled with containment volume calculations, were then modeled to determine the bulk average temperature of the enter building. The distribution scheme through the ductwork that was present at the time of baseline readings for average containment temperature is not changed. Therefore, the stratification assumptions made in the containment temperature model would not be affected by aligning the normal and emergency dampers open. As such, an unreviewed safety question was determined not to exist.

### **USQD Number 99-0947**

#### **Description**

The Inservice Testing (IST) Program for pumps and valves was revised to clarify applicability of later revisions to the ASME BP&V Code and to add components to the test program as a result of approved modifications. This revision also includes editorial changes, corrections to typographical errors, and the conversion (electronically) of the Cold Shutdown justification section to table format.

### **Summary of Safety Evaluation**

Implementation of this revision is commensurate with approved ASME BP&V Codes and Standards which govern IST, and therefore will not increase the probability or consequences of a previously evaluated accident. The revision does not alter the requirements or tests that are currently in place, and required by ASME Code Section XI, apart from the new requirements that were added. This revision improves the understanding of certain aspects of the program with regard to NRC requirements which are listed in other documents. This revision does not affect the margin of safety as defined in the Bases of any Technical Specification, but rather, ensures that components applicable to ASME BP&V Code requirements have been evaluated, categorized, and tested commensurate with the intent of the Code. As such, an Unreviewed Safety Question was determined not to exist.

### **USQD Number 99-0995**

#### **Description**

Engineering evaluation was performed to demonstrate the "B" emergency diesel generator (EDG) is operable without Heating Ventilation Exhaust (HVE)-17 being operable. Also evaluated was the failing open of the suction and exhaust dampers for the EDG ventilation fans.

## **Summary of Safety Evaluation**

The operation of the EDG B with HVE-17 inoperable and the suction and exhaust dampers open does not adversely affect the functional requirements of EDG B. EDG B is still be able to perform its intended safety function due to having more than adequate air flow through the EDG room. The only safety function that is being impaired is the fire protection function of the suction and exhaust ventilation dampers of both EDG rooms. However, this deviation in the fire protection program is being monitored and compensatory actions taken per plant approved procedure. This procedure contains a 14 day time limit on this fire protection program deviation at which time a condition report must be generated to assess the situation per the corrective action program.

This safety evaluation concluded that these compensatory actions are acceptable and do not adversely impact the facility as described in the UFSAR. These compensatory actions do not constitute an Unreviewed Safety Question. HVE-17 is not connected to any system that can cause an accident nor will it prevent other accident mitigating equipment from performing a safety related function. Therefore, no Unreviewed Safety Question arises from the condition being evaluated. In addition, since the dampers are left in an open position, fire protection has added compensatory measures adequate to cope with a fire emergency.

## **USQD Number 99-1015**

### **Description**

UFSAR Table 11.1.1-1 was revised to reflect data cited in the Westinghouse Radiation Shielding Plant Design Bases analysis and/or the FSAR. UFSAR Table 11.1.1-2 was revised to reflect the 1% failed fuel equilibrium activities cited in the FSAR. UFSAR Table 11.1.2-1 was revised to reflect data cited in the Siemens Power Corporation (SPC) Tritium Production analysis and UFSAR Table 11.1.2-2 was revised to clarify information presented. UFSAR Section 11.1.3 was revised to reflect the configuration of "live loaded" valves as installed in a recent modification. UFSAR Section 12.3.1.4 was revised to include a reference to the Radiation Shielding Design Review that was performed in response to NUREG-0737, "Clarification of TMI Action Plan." UFSAR Table 12.3.1-1 was revised to reflect data from the Westinghouse Radiation Shielding Plant Design Bases analysis.

## **Summary of Safety Evaluation**

The data in UFSAR Tables 11.1.1-1 and 11.1.2-1 is intended to represent or bound actual plant operations. The changes to the data in UFSAR Sections 11.1.1, 11.1.2 and 12.3 do not alter any actual plant operating conditions, do not create any new actual plant operating conditions and do not alter the design or operation of any systems, structures, or components (SSCs) which could increase the probability of an accident or malfunction of equipment important to safety. The change to the description of the CVCS valves in UFSAR Section 12.3 does not impact the ability of these valves to function as designed under normal and accident conditions and therefore, does not increase the probability of an accident or malfunction of equipment important to safety. The

changes do not alter the design or function of any equipment credited for mitigating the consequences of any accident or malfunction of equipment important to safety evaluated in the SAR. These changes do not alter the iodine and noble gas concentrations associated with 1% failed fuel utilized in UFSAR Sections 15.1.5, 15.7.1, and 15.7.3; therefore the changes do not increase the consequences of these accidents. The inclusion of a reference to the Radiation Shielding Design Review required by NUREG-0737 Item II.B.2.2 does not alter the results of that review and therefore does not increase the radiological consequences to plant personnel during a design basis accident such as a LOCA or MSLB. The changes do not create the possibility of a new accident or malfunction of equipment important to safety because no new equipment or systems are involved and no new operating configurations or conditions are created. The change made to the description of CVCS valves has already been evaluated by a recent modification and the revision of UFSAR Section 9.3.4.3. The changes do not alter the design or function of any systems, structures or components. The Technical Specifications establish limits on the amount of radioactivity allowed in the RCS, Secondary, radwaste storage tanks and plant effluents which protect the Chapter 15 analyses and ensure compliance with 10 CFR 20 and 10 CFR 50 limits. Compliance with these Technical Specification limits is demonstrated by measurement of the radionuclides in actual samples not by use of the predicted values contained in UFSAR Section 11.1; therefore, the margin of safety can not be reduced by the changes proposed in this LDCR. Therefore, the changes do not create an Unreviewed Safety Question.

## **USQD Number 99-1025**

### **Description**

The Heating Ventilation Exhaust (HVE)-17 motor has been rewound. The measured full load current of the rewound motor is higher than the motor nameplate. UFSAR Table 8.3.1-1 was revised to show the increased motor current.

### **Summary of Safety Evaluation**

The increased full load current, and resulting motor kW increase, of the HVE-17 motor is within the capability of Emergency Diesel Generator (EDG) B. The two hour and continuous ratings of EDG B are not exceeded. The field changes ensure that the HVE-17 motor will perform its safety related function. Operating the HVE-17 motor at higher full load currents will not effect the probability of occurrence of an accident previously evaluated. The larger thermal overload heater provide adequate motor protection without compromising electrical coordination with upstream protective devices. Therefore, increasing the motor loading does not increase the consequences of an accident previously evaluated in the SAR. Also, this confirms that large equipment will not be subject to nuisance tripping. An Unreviewed Safety Question was determined not to exist.

## **USQD Number 99-1041**

### **Description**

References to specific Corrective Action Program procedures in the Technical Requirements Manual Specifications (TRMS) were removed and reference to the generic title "Corrective Action Program" was added in their place.

### **Summary of Safety Evaluation**

This change does not involve any change to the systems, structures, or components (SSCs) described in the Safety Analysis Report (SAR). Since the existing Corrective Action Program procedure, the superceded procedure, and the new corporate procedure all implement the requirements of 10 CFR 50, Appendix B, Criterion XVI, "Corrective Action," and since these procedures describe how to initiate a Condition Report, the proposed change does not affect the actions required by the TRM. This change does not affect the design, construction, installation, maintenance, operation, or testing of systems, structures, or components described in the SAR. The evaluation finds that the changes to the TRM do not increase the probability or consequences of an accident or equipment malfunction, create a new possibility of an accident or equipment malfunction, decrease the margin of safety, or pose an Unreviewed Safety Question.

## **USQD Number 99-1086**

### **Description**

UFSAR Section 15.7.4, Design Basis Fuel Handling Accidents, was revised to indicate that control rods are tripped all at once instead of individually.

### **Summary of Safety Evaluation**

Tripping the rods and verifying that they have tripped provides assurance that the drive shafts are not bound inside the CRDMs which are attached to the reactor vessel head. Tripping each rod individually or all of them at once does not alter the intent. Since the configuration of tripped condition for all the rods does not change, no alteration to initial conditions of Chapter 15 Section 15.7.4.1 type of accident is altered. Section 15.7.4.1 fully bounds tripping all the rods at once rather than one at a time since the intent is to have the rods fully inserted prior to any fuel handling activities. No safety equipment is being altered. The rods will still be placed into a tripped condition prior to any refueling activities. Performing this trip function all at once will not affect any safety equipment in any way. As such, an Unreviewed Safety Question was determined not to exist.

### **USQD Number 99-1109**

#### **Description**

UFSAR Section 9.4, page 9.4.1-2, was revised to differentiate whether the temperatures listed are for normal or accident conditions. A statement was added to indicate that individual compartments within these structures may exceed the maximum temperatures listed if previously evaluated.

#### **Summary of Safety Evaluation**

The changes to the description of the temperatures contained in this text do not invalidate design documents and will not affect the results of future design documents. The UFSAR is not used as a design document. This administrative revision does not affect the operation of the plant or plant equipment. The changes to the description do not change the intent of the information presented in the UFSAR. They only clarifies the meaning. As such, a Unreviewed Safety Question was determined not to exist.

### **USQD Number 99-1119**

#### **Description**

A special test that temporarily made both trains of the Control Room Emergency Air Temperature Control Water System inoperable was performed to demonstrate that service water flow rate meets minimum acceptance criteria for the Control Room Condensing Unit when the water source is the South Service Water Header. The special procedure was performed to test the alternate cooling water path to the Water Cooled Condensing Units (WCCUs) serving the Control Room air conditioning

#### **Summary of Safety Evaluation**

The special test changed the normal valve line-up resulting in two Control Room Emergency Air Temperature Control Water Cooled Condensing Units being inoperable and entry into applicable Conditions of LCO 3.7.10. Following testing, the normal valve line-up was restored and the LCO exited. Since the valve line-up was controlled by procedure and the non-intrusive controlotron (flow measuring device) did not adversely affect the Service Water System, there was no increase in probability of occurrence of an accident, no increase in consequences of an accident, no increase in the probability of occurrence of a malfunction, no increase in the consequences of a malfunction, no possibility of an unevaluated accident, no possibility of an evaluated malfunction, and no reduction in safety margin. As such, an Unreviewed Safety Question was determined not to exist.

## **USQD Number 99-1122**

### **Description**

Technical Specification 3.3.3 LCO Bases were revised to reflect the actual design basis configuration of the Regulatory Guide 1.97 Post Accident Monitoring Cold Leg Temperature Indicators. The RCS Loop A Cold leg temperature instrument is a Category 3 variable and does not meet RG 1.9.7 design criteria for emergency power. RCS Loop B and C cold leg temperature instruments do not meet RG 1.97 design criteria for redundancy. This change resolves a non-conforming condition related to the bases of Post Accident (PAM) Monitoring Instrumentation Technical Specification 3.3.3. Recent engineering evaluations have shown that the original Regulatory Guide 1.97 submittals were not correct as they relate to the power supply independence of two RCS Cold Leg Temperature indications. This change clarifies the TS Bases to more correctly reflect the design basis.

### **Summary of Safety Evaluation**

The design basis for the Regulatory Guide 1.97 PAM Cold Leg Temperature indication has been evaluated to assure that the indication meets the requirements for Category 1 except for power supply independence. The change to the TS Bases does not increase the probability of occurrence of an accident since it does not change any equipment or system operation or add any equipment or system to the plant. The likelihood of a radioactivity release or a breach of a designed barrier is not affected by this TS Bases change. The TS Bases Change will not prevent any equipment from operating or change the response of the PAM RCS Cold Leg Temperature indicator on the Reactor Turbine Generator Board (RTGB) therefore it will not increase the probability of occurrence of a malfunction of equipment important to safety previously evaluated in the SAR. The consequences of a malfunction of any equipment failure will not be affected because the change does not affect the performance of any equipment or its current failure mode and therefore any consequence of that failure. The ability of the plant staff to monitor the accident or any mitigating equipment is not affected. A loss of the Cold Leg temperature indications would not affect the primary indications or their failure modes. The loss of Cold Leg Temperature indications would not cause any new or different type of malfunction of equipment important to safety. The proposed Bases change does not change the performance or methods of PAM and therefore does not affect the margins assumed in any accident evaluations. Therefore the change to TS Bases 3.3.3 does not result in an Unreviewed Safety Question.

## **USQD Number 99-1145**

### **Description**

A station procedure was issued to allow the use of Reactor Pressure Vessel (RPV) Cavity Seal System for the purposes of filling the cavity and moving fuel. The design and the use of the RPV Cavity Seal at H.B. Robinson Steam Electric Plant, Unit No. 2 were evaluated with focus on the material, fit, Seismic, and Safety Related issues. The new cavity seal maintains water levels in the Cavity as required by Technical Specifications.

### **Summary of Safety Evaluation**

The RPV Cavity Seal maintains water cavity level within Technical Specification limits. The new seal is constructed of compatible materials in accordance with plant procedures. The RPV Cavity Seal can withstand a fuel drop accident and maintain cavity level. The RPV Cavity Seal is on the Q-list and is Seismically qualified. The probabilities of any accidents have not increased by the use of this cavity seal. The consequences of a fuel handling accident are bounded by current design basis accidents. No reduction of margin has occurred by using this cavity seal. As such, an Unreviewed Safety Question was determined not to exist.

### **USQD Number 99-1162**

#### **Description**

The UFSAR description and Technical Specification Bases description of the Station Batteries and motor control centers (MCCs) were changed. Changes were made to reflect the replacement of the B Station Battery with a model having a larger capacity. Also, clarify descriptive statements were added to indicate that battery capacity does not remain constant as it ages. The MCC, which supplies the B charger, was corrected (MCC-6 not MCC-6A).

### **Summary of Safety Evaluation**

An evaluation of the change concluded that neither the probability or consequences of an accident/equipment malfunction are increased and that the margin of safety is not diminished. The potential impacts resulting from installation of a higher capacity battery were evaluated. The TS Bases change to the description of battery capacity obtained after selection of an available commercial battery only represents an editorial change which reflects the fact that capacity changes over its life. The description change does not involve a physical change to the facility, methods of testing or methods of sizing. Actual battery capacity is not impacted. Technical Specification Surveillance Requirement SR 3.8.4.6 supports the change in that it provides minimum capacity requirements which must be maintained throughout the life of the battery. Finally, the change to the designation of the MCC which supplies the B charger does not involve a physical change to the facility or procedures. Both the B and B-1 chargers are B train equipment fed from MCC-6. The change does not impact train separation requirements or redundancy requirements. Train "A" chargers are fed from MCC-5. As such, an Unreviewed Safety Question was determined not to exist.

### **USQD Number 99-1179**

#### **Description**

Two new steps were added to EPP-18, SGTR With Loss of Reactor Coolant: Saturated Recovery. These new steps isolate the SI Accumulators prior to the RCS depressurization to saturation provided that Safety Injection (SI) has been terminated.

#### **Summary of Safety Evaluation**

An accident is already in progress when these new added steps would be performed. Therefore, the addition of these steps cannot increase the probability of an accident previously evaluated in the SAR. The intent of the emergency response guidelines (ERGs) is to isolate the accumulators prior to their injection if SI has been terminated. The added steps verify SI has been terminated prior to isolating the accumulators as required by ERG. The new steps isolate the accumulators prior to the depressurization. Thus in both cases, the intent of the ERG is maintained. Based on this, the isolation of the accumulators at this stage in the procedure, provided SI has terminated, will not increase the consequences of the accidents intended to be mitigated by this procedure. The margin of safety, as defined by the Bases of the Technical Specifications, is not affected by the use of these steps to isolate the SI Accumulators. The accidents mitigated by this procedure are not described in the Technical Specifications, their Bases, or the UFSAR. As such, an Unreviewed Safety Question was determined not to exist.

### **USQD Number 99-1192**

#### **Description**

Four shock suppressors (snubbers) were temporarily removed from each of the three steam generators for testing during Refueling Outage (RFO) 19.

#### **Summary of Safety Evaluation**

An evaluation for removal of the snubbers concluded Reactor Coolant System (RCS) piping integrity would not be affected. The evaluation addressed the increased loading to the deadweight, thermal and seismic loads at the lower support and concluded that the resulting loads would remain below the design loads based on pipe rupture. Therefore, the lower steam generator supports will remain functional during a design basis earthquake and the RCS piping will maintain its structural integrity. Based on this demonstration of structural integrity, there is no increase in probability of occurrence of an accident, consequences of an accident, occurrence of a malfunction, or consequences of a malfunction. A different type of accident or malfunction is not credibly introduced and the margin of safety is not reduced. As such, an Unreviewed Safety Question was determined not to exist.

### **USQD Number 99-1213**

#### **Description**

A drain line was added downstream of Service Water valve V6-16-16B in the CCWHX room to allow drainage of line 16-CW-44 and permit replacement of V6-16A and C.

#### **Summary of Safety Evaluation**

An analysis concluded that sufficient pipe supports are available to accommodate added loads. The materials selected were compatible with the interfacing components and fluid. There was sufficient space to install the new drain line without preventing the operation or maintenance of nearby components. Debris produced from the boring operation was retrieved from the system. Procedures exist to control abnormal conditions (i.e., AOP-022). As such, an Unreviewed Safety Question was determined not to exist.

### **USQD Number 99-1247**

#### **Description**

The LBLOCA path in EPP-009, "Transfer to Cold Leg Recirculation," was changed to reduce the maximum allowable operator action time for the low flow period associated with switchover of the RHR pump from The RWST to the Sump from 30.5 minutes to 20 minutes, and to increase the allowable "no-flow" time associated with the switchover to piggy back from 3 minutes to 6 minutes. To ensure that the switchover to piggyback can be accomplished without significant heat-up, the hold point was changed from 76 minutes to 73 minutes to ensure that the decay heat has been reduced to acceptable levels. The 6 minute operator action time to complete the "no-flow" portion of the switchover to piggyback evolution incorporated consideration of the plant modification to increase the stroke time for the SI-863B valve.

#### **Summary of Safety Evaluation**

Since the fuel heat-up is much less than previously predicted and reported, the EPP-009 changes proposed in Revision 22 of the procedure do not reduce and margin of safety as defined in the Bases of any Technical Specification. The scenario modeled will provide the same containment spray availability as provided by the current EPP-009 requirements. Therefore, the containment pressure and dose mitigating functions of the containment spray system are not degraded by the revised scenario. Therefore, the margin to the containment pressure limit is not reduced and the dose consequences of the LOCA are not impacted by these changes. The revised switchover evolution does not create a different kind of accident. The revision simply redefines the operator action timing associated with the current basic scenario directed by EPP-009. The LBLOCA Switchover Analysis of Record (AOR) reported in UFSAR Section 15.6.5 continues to bound the new switchover evolution. As such, an Unreviewed Safety Question was determined not to exist.

### **USQD Number 99-1261**

#### **Description**

BF relays were replaced with relays identical in make and model but with a coil that draws more current and does not meet the requirements of an equivalent replacement.

#### **Summary of Safety Evaluation**

The replacement relay is identical to the old relay in form, fit, and function. Other than the additional power consumption of the relay, the new relay is identical. The replacement relays will perform identically to the original designed relay. This was treated as a simple load addition to the electrical system which was evaluated for the specified relays as acceptable. The additional heat to the evaluated rooms and cabinets has shown to be bounding within the existing conditions and will not impact other safety related equipment. The replacement relay will not increase the probability of occurrence of a malfunction of equipment important to safety as the function and operation of the relay has not changed. The replacement relay is exactly like the old relay which has been in service for over 20 years with the exception that the coil draws more current. Therefore, no new failure mechanism has been introduced and the possibility of a different type accident than previously evaluated has not changed. Since the new relays will perform identically to the previous relays, no margin of safety has changed as defined in any Technical Specification. As such, an Unreviewed Safety Question was determined not to exist.

### **USQD Number 99-1264**

#### **Description**

A Temporary Modification that disabled the Condenser Hotwell high level alarm to reduce the number of nuisance alarms was changed to a permanent modification.

#### **Summary of Safety Evaluation**

The alarm performs no automatic function. The disabling of the alarm will not challenge any safety system. Level indication will remain available and Operations will continue to have control of hotwell level. The modification does not introduce an Unreviewed Safety Question.

### **USQD Number 99-1334**

#### **Description**

The epoxy joint filler used as a moisture barrier between the containment concrete floor and the CV Liner at elevation 228 was removed during Refueling Outage 19 to allow visual inspections of the liner and replaced with a silicone joint filler.

### **Summary of Safety Evaluation**

The function of this moisture barrier is to provide leak tightness to prevent moisture from contacting the concrete floor-CV Liner interface point. An evaluation to determine whether the use of silicone rather than epoxy has any effect on that function was performed. There is no fundamental change to any equipment or operation of the plant that could introduce a new or different type of failure mode or initiator or place the plant equipment under substantially different operating demands. The reload will not increase the severity of the operating environment for any equipment or impose additional loads or operating demands on equipment. The analysis performed in support of Cycle 20 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. Therefore, the margin of safety has not been reduced. As such, an Unreviewed Safety Question was determined not to exist.

### **USQD Number 99-1358**

#### **Description**

Activities associated with Appendix R safe shutdown were evaluated to ensure actions can be completed in a timely manner to restore service water in support of Appendix R performance goals. The evaluation determined that V6-12D can be operated electrically from the Reactor Auxiliary Building (RAB) for any credible fire in Fire Area A of the RAB using Appendix R Alternate A or Alternate B methodology, depending on the location of the fire.

### **Summary of Safety Evaluation**

This USQD applies to an Appendix R fire, and Appendix R assumes no other event occurs in conjunction with the fire. Therefore, this activity will not increase the probability or consequences of an accident or of a malfunction of equipment import to safety; or create an accident or equipment malfunction of a new type. The evaluation shows that there is no reduction in equipment or plant performance associated with the Appendix R activities, so there is no reduction in margin of safety. As such, an Unreviewed Safety Question was determined not to exist.

### **USQD Number 99-1405**

#### **Description**

A Temporary Modification was implemented that injected sealant material through a hole drilled in a pipe cap to eliminate a seat leak in a vent valve on Main Steam piping.

### **Summary of Safety Evaluation**

The injection of sealant material into through the pipe cap up to the valve seat will help to

maintain the integrity of the system under normal operating conditions and ensure that the current margin of safety is maintained. Implementation of this modification ensures leak tightness and thereby, reduces the likelihood of degraded system conditions in an accident scenario. Use of this particular process to eliminate leaks is an accepted industry practice and is in existing approved plant procedures. Therefore, an Unreviewed Safety Question was determined not to exist.

### **USQD Number 99-1416**

#### **Description**

This revision deletes the alternate hot leg recirculation flow paths provided in EPP-10, "Transfer to Long Term Recirculation," in the event that valve SI-869 fails to be open when EPP-10 is entered during a LOCA scenario. This flow path used the RHR system shutdown cooling suction valves, RHR-750 and RHR-751 as an injection pathway via the RHR Pump recirculation

#### **Summary of Safety Evaluation**

H. B. Robinson Steam Electric Plant (HBRSEP) Unit 2 was designed and constructed prior to the establishment of 10CFR50, Appendix K. Although HBRSEP Unit 2 has multiple redundant pathways for cold leg injection during the injection phase of an accident, there had been no intent to offer the same for hot leg injection, or to provide for failures that have been designated as "passive." The failure of SI-869 to open prior to hot leg recirculation is not considered credible. During the performance of EPP-10, the valve could experience an active failure (assuming no failure while in EPP-9). If RCS pressure is greater than 125 psig, the valve is required to be closed in order to shift back and forth between hot leg and cold leg recirculation every 16 hours. If the valve were to fail to close during this evolution, SI-866A and B are available as redundant isolation valves. There is no increase in the probability of an event occurring or the consequences of an event by this revision. Based on the above, the removal of this alternate pathway results in an overall reliable strategy, which in turn, improves the overall safety margin during this event. As such, an Unreviewed Safety Question was determined not to exist.

### **USQD Number 99-1493**

#### **Description**

A pin hole leak on a Service Water (SW) line downstream of SW-740 was repaired using a pipe overlay method. A weld overlay was added to the "A" Component Cooling Water (CCW) heat exchanger (HX) return elbow to restore minimum wall thickness.

### **Summary of Safety Evaluation**

There are no structural, system capacity, flooding, spraying, or seismic issues which could adversely affect the SW system in performing its design basis functions following the repair of the degraded tee downstream of SW-740 and the degraded elbow downstream of the "A" CCW HX. As such, an Unreviewed Safety Question was determined not to exist.

### **USQD Number 99-1545**

#### **Description**

UFSAR Figures 10.1.0-3, 10.1.0-4, 10.1.0-6 and 10.1.0-7 were revised to show the isolation valves upstream of the thermal relief valves for the tube sides of the feedwater heaters in the closed position subsequent to an engineering evaluation performed to permit the change in position

### **Summary of Safety Evaluation**

Closing the thermal relief valves for the isolation valves upstream of the thermal relief valves on the feedwater heaters has no effect on any accident scenarios involving the feedwater system. The change does not prevent the feedwater system from performing its function. In the event there is a malfunction of the feedwater system, the Auxiliary Feedwater System would provide water to the steam generators to assist in reactor coolant system cooldown. The feedwater heaters and piping have been tested to 1.5 times the design pressure. The maximum amount of head pressure that the condensate piping can develop is approximately 1600 feet of head. Therefore, isolating the valve upstream of the thermal relief valve will not create the possibility of a different type of accident since the maximum pressure that the heaters could be subjected to is less than the tested design pressure. During startup or shutdown, the steam that is used to heat the feedwater is not being fed into the feedwater heaters. Therefore, overpressure protection is not needed. Plant procedure has the isolation valves open if the heater is cleared for maintenance while the plant is operating to ensure that thermal overpressurization does not occur in the heater. As such, an Unreviewed Safety Question was determined not to exist.

### **USQD Number 99-1565**

#### **Description**

The UFSAR was revised to correct discussion regarding the required level that must be maintained in the Condensate Storage Tank (CST) and to correct an obvious typographical error.

### **Summary of Safety Evaluation**

This UFSAR change corrects the discussion of the required level to be maintained in the CST and corrects an obvious typographical error. The appropriate level, supported by a plant

calculation and controlled by the Technical Specifications, is maintained by plant procedures. The plant is operated as required and in a technically correct manner. Since the plant is operated as designed and within required parameters, the change does not increase the probability of occurrence or the consequences of an accident; the probability of occurrence or the consequences of a malfunction of equipment important to safety; create the possibility of an accident of a different type; create the possibility of a malfunction of equipment important to safety, create the possibility of an accident of a different type than any previously evaluated, or reduce the margin of safety as defined in the Bases of any Technical Specification. Therefore, the change does not constitute an Unreviewed Safety Question.

### **USQD Number 99-1578**

#### **Description**

The UFSAR was revised to document the methods used to comply with 10 CFR 50.68(b), "Criticality accident requirements," which provides an acceptable alternative to 10 CFR 70.24. 10 CFR 70.24 requires a criticality monitoring system in areas where new and irradiated fuel are handled and stored.

#### **Summary of Safety Evaluation**

This activity revises the UFSAR to document the methods used to meet the requirements of 10 CFR 50.68(b). No physical changes were made to the plant and no changes were made to the operation of equipment that can initiate an accident or equipment that is used for accident mitigation. The revision documents how existing equipment and practices are credited to meet NRC requirements. There are no changes to the design, construction, operation, maintenance, and testing of plant equipment. No effect was found on accident consequences, probabilities, equipment failure modes and effects, equipment failure consequences, or safety margin. As such, an Unreviewed Safety Question was determined not to exist.

### **USQD Number 99-1622**

#### **Description**

This change lowers the Emergency Diesel Generator (EDG) Diesel Fuel Oil Storage Tank (DFOST) alarm level from 92% to 85%.

#### **Summary of Safety Evaluation**

The only change made to the plant was to lower the existing alarm setpoint (which is still set above the TS required minimum of 19,000 gallons) by 309 gallons. Based on this being the only change, there is no impact on any accident analysis or the functionality of any safety related equipment. No new mechanisms are introduced to promote existing or new failures or the probabilities thereof. The Fuel Oil and EDGs are accident mitigation systems and changes made

to them will not increase the probability of occurrence of accidents they are designed to combat. Finally, it was determined that there was no increase in dose associated with previously analyzed SAR accidents as a result of this activity and Technical Specification Bases margins were not altered. Therefore, it was concluded that the change did not represent an Unreviewed Safety Question.

### **USQD Number 99-1703**

#### **Description**

Special Procedure (SP) 1476, "Gland Seal Ring Rub and Rotor Stability Test," was issued to perform the subject test.

#### **Summary of Safety Evaluation**

The net effect of implementation of this procedure is to allow vibration levels to increase on the Turbine to 11 mils prior to taking action to reduce those vibrations. This is only a few mils increase and does not represent a challenge to the Turbine for the short period of time that the test will be performed. Turbine vibration is an economic concern only since the Turbine is not a safety related component and is not credited in any of the safety analyses contained in the SAR or the Bases for any Technical Specification. The only safety related function that the Turbine must be capable of performing is to trip when called for and to provide an input to the reactor protection system showing that the Turbine is tripped. This special procedure does not alter any of these functions. As such, an Unreviewed Safety Question was determined not to exist.

### **USQD Number 00-0110**

#### **Description**

UFSAR Figure 1.2.2-1 was revised to show the location of the Fuel Shipping Cask Yoke Storage Building which was fabricated to house the Cask Yoke when not in use.

#### **Summary of Safety Evaluation**

The Fuel Shipping Cask Yoke Storage Building is not connected to systems or equipment used to mitigate an accident nor is it part of the mitigation strategy for any accident. The area is not considered part of the containment vessel, auxiliary building or turbine building. It is considered a miscellaneous building located in the Radiation Controlled Area (RCA) yard. This building encloses the Cask Yoke when not in use and does not impact any accident previously evaluated. The construction of the building is similar to other existing buildings in the yard area and therefore does not introduce new missiles (types or materials) considerations. The building is in an area which will not affect equipment important to safety. The building does not affect any Technical Specification system or their margins. As such, an Unreviewed Safety Question was determined not to exist.

**USQD Number 00-0237**

**Description**

Revision 44 to the Emergency Plan (PLP-007) contains increased guidance for meteorological data, Supervisor - Emergency Preparedness program responsibilities, and agreement letter signature authority. The meteorological instrument table was rearranged to reflect the USFAR and installed instrumentation. Informational copies of the plan and procedures were removed from the distribution lists. Also in this revision is the change of primary fire protection response from off site and deletion of letter of agreement copies contain in the plan.

**Summary of Safety Evaluation**

None of the changes to the Emergency Plan delete a previously performed function without a coincident reduction in regulatory requirement. As such, this revision does not reduce the effectiveness of the Emergency Plan. Additionally, these changes to the Emergency Plan did not affect the design, construction, operation, installation, failure modes and effects, maintenance, or testing of systems, structures, and components assumed to fail to initiate an accident or equipment malfunction, or to mitigate the consequences of an accident or equipment malfunction, or assumed as design basis or technical specifications margin. Therefore, an Unreviewed Safety Question was determined not to exist.