The Light company
Houston Lighting & Power

P.O. Box 1700 Houston, Texas 77001 (713) 228-9211

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U. S. Nuclear Regulatory Commission
Attention: Document Control Desk
Washington, DC 20555

South Texas Project Electric Generating Station
Units 1 and 2
Docket Nos. STN 50-498, STN 50-499
Annual 10CFR50.59 Summary Report

Pursuant to 10CFR50.59, Houston Lighting & Power Company (HL&P) submits this annual report which describes changes, tests, and experiments associated with the South Texas Project Electric Generating Station and the required safety evaluations. Note that there are gaps in the numerical sequence of the attached summaries. These represent safety evaluations that have been cancelled, were incomplete when this report was prepared, or were submitted with the previous annual report.

This report includes summaries of Justifications for Continued Operation (JCOs). These JCOs use the criteria of 10CFR50.59 to assure that operability determinations including any required compensatory measures, assure the facility continues to operate within its design bases consistent with Technical Specifications. Consequently, the attached JCOs did not entail waivers of compliance.

If you should have any questions, please contact Mr. P. L. Walker at (512) 972-8392 or myself at (512) 972-8530.

M. A. McBurnett
Manager
Nuclear Licensing

PLW/sgs

Attachments: 1) Summary of Unreviewed Safety Question Evaluations
2) Summary of Justifications for Continued Operation

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cc:

*Regional Administrator, Region IV
Nuclear Regulatory Commission
611 Ryan Plaza Drive, Suite 1000
Arlington, TX 76011

*George Dick, Project Manager
U.S. Nuclear Regulatory Commission
Washington, DC 20555

*J. I. Tapia
Senior Resident Inspector
c/o U. S. Nuclear Regulatory
Commission
P. O. Box 910
Bay City, TX 77414

J. R. Newman, Esquire
Newman & Holtzinger, P.C.
1615 L Street, N.W.
Washington, DC 20036

R. P. Verret/D. E. Ward
Central Power & Light Company
P. O. Box 2121
Corpus Christi, TX 78403

J. C. Lanier/M. B. Lee
City of Austin
Electric Utility Department
P.O. Box 1088
Austin, TX 78767

R. J. Costello/M. T. Hardt
City Public Service Board
P. O. Box 1771
San Antonio, TX 78296

Rufus S. Scott
Associate General Counsel
Houston Lighting & Power Company
P. O. Box 61867
Houston, TX 77208

INPO
Records Center
1100 Circle 75 Parkway
Atlanta, GA 30339-3064

Dr. Joseph M. Hendrie
50 Bellport Lane
Bellport, NY 11713

D. K. Lacker
Bureau of Radiation Control
Texas Department of Health
1100 West 49th Street
Austin, TX 78756-3189

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Revised 10/08/90

L4/NRC/

ATTACHMENT 1
UNREVIEWED SAFETY QUESTION EVALUATIONS

Unreviewed Safety Question Evaluation #88-073 Rev. 1

Subject: WKM Valve Operators

Description: A potential elastomeric material incompatibility exists with the hydraulic fluid used in the Main Feedwater Isolation Valve operators. If the valve seals are incompatible with the hydraulic fluid, leakage past the seals could result.

Safety Evaluation:

1) Does the subject of this evaluation increase the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report?

The potentially incompatible material was located in the non-safety portion of the feedwater isolation valve hydraulic power unit. There is no increase in the probability of occurrence of an accident in that the only event that could considered as potentially impacted by this deficiency is an unnecessary feedwater isolation. There is no increase in feedwater isolation events and no increase in the probability of occurrence of an accident as previously evaluated in the Safety Analysis Report.

The potential incompatibility will not have an impact on the ability of these valves to close. Since there is no impact on the safety function of these valves, there is no increase in consequences of any accident previously analyzed.

There is no increase in the probability of occurrence of a malfunction of equipment important to safety by this potential deficiency. The only consequence would be slightly increased leakage of supply fluid to the valve actuator. This would not impact the ability of the valve to close, nor would it result in failure of the valve to open. Increased leakage would result in minor increases in pump running to maintain pressure to the actuator and very minor increases in valve opening times.

The consequences of a malfunction of the feedwater isolation valve was previously analyzed in the safety analysis report. The subject deficiency does not increase the probability of malfunction and does not increase the consequences of a malfunction.

Unreviewed Safety Question Evaluation #88-073 Rev. 1 (Cont'd)

2) Does the subject of this evaluation create the possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report?

There is no potential for creation of an accident of a different type than previously analyzed. There is no impact to the probability or consequences of failure of a feedwater isolation valve to close or inadvertent feedwater isolation. There is no potential for a different type of accident in that the potentially incompatible materials are in the non-safety portion of the valve hydraulic power unit which is not in contact with any primary or secondary coolant.

There is no possibility of a different type of malfunction of equipment important to safety. The potentially incompatible material would only result in slightly increased leakage past the pulsation dampeners back to the system reservoir. This would not result in malfunction of the equipment. The only impact would be slightly increased pump operation frequency and very minor increase in valve opening time.

3) Does the subject of this evaluation reduce the margin of safety as defined in the basis for any technical specification?

The margin of safety as defined in the bases for the technical specifications is not impacted. The technical specifications require feedwater isolation in a prescribed time for various accidents. The potential malfunction does not slow down or hinder valve closing times.

Based upon the above, there is no unreviewed safety question.

Approved: 8/09/90

Unreviewed Safety Question Evaluation #88-084

Subject: Deletion of P-15 Excessive Cooldown Protection

Description: This temporary modification deletes P-15, removing from service Low-Low Compensated Tcold Safety Injection, Low Compensated Tcold FW Isolation, and Hi Feed Flow coincident with Lo Tavg or Lo RCS Flow Feedwater isolation.

Safety Evaluation:

1) Does the subject of this evaluation increase the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report?

   The safety analysis was performed without taking any credit for the Excessive Cooldown Protection actuation. Deletion of Excessive Cooldown will have no effect when an accident occurs. Since no credit was taken in the safety analysis, the consequences of deleting P-15 is not increased either. For the same reason, actuation circuits which do not operate will not affect equipment important to safety.

2) Does the subject of this evaluation create the possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report?

   Deletion of P-15 actuation circuitry has no effect on fluid systems, control systems, procedure sequences, or methods. Therefore, an accident or malfunction of a different type cannot occur.

3) Does the subject of this evaluation reduce the margin of safety as defined in the basis for any technical specification?

   Since the safety analysis does not take credit for Excessive Cooldown protection, removal of Excessive Cooldown protection does not reduce the margin of safety.

Based upon the above, there is no unreviewed safety question.

Approved: 11/29/89

Unreviewed Safety Question Evaluation #89-031

Subject: Missile Barriers

Description: The FSAR description of two missile barriers is revised as follows:

1. Auxiliary Feedwater Valve pit:
FSAR Table 3.5-10 states that the missile barrier for the Aux. Feedwater lines and valves is a 24 in. concrete roof. The table is revised to include the 3/4 in. steel hatch covers that also serve as missile barriers. The purpose of the revision is to provide a more complete description of the missile barrier.

2. Auxiliary Airlock Shield Structure:
The FSAR Change Request incorporates NRC Q130.8 into Section 3.5.3.1.1. The response to NRC Q130.8 states that the minimum thickness of concrete barriers is 2 ft. The response is revised to reflect that the thickness of the concrete roof of the Aux. Airlock Shied Structure is 1 ft. and that the 1 ft. roof has been analyzed and determined to provide the necessary protection for missile impact.

Safety Evaluation:

1) Does the subject of this evaluation increase the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report?

Auxiliary Feedwater valves are protected from overhead missiles by a 24-in. concrete roof and 3/4-in. steel hatch covers. Both barriers were designed to withstand the effects from tornado missiles in accordance with procedures outlined in FSAR section 3.5.3 (ref. calculation CC 6107 rev. 5). The steel barrier will provide the same protection to the valves as the concrete roof. The consequences of a tornado missile impacting the valve pit roof are not increased.

The Auxiliary Airlock is protected from overhead missiles by a 12-in. concrete roof. The concrete roof was analyzed to withstand all of the effects of tornado missiles except for spalling or scabbing in accordance with FSAR section 3.5.3. Spalling or scabbing of the concrete roof could create secondary missiles that impact the Auxiliary Airlock. The airlock was analyzed to show that protection from these secondary missiles is provided. The analysis was performed in accordance with the provisions outlined in FSAR section 3.5.3. The consequences of

Unreviewed Safety Question Evaluation #89-031 (Cont'd)

a tornado missile impacting the auxiliary airlock shield structure are not increased. Since the function of the Auxiliary Airlock remains intact and the integrity of the barrier to the valve pit is intact, the subject of this evaluation does not increase the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report.

2) Does the subject of this evaluation create the possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report?

Since integrity of the structures, systems, and components remains intact, this change does not create the possibility for an accident or malfunction of a different type than previously evaluated in the safety analysis report.

3) Does the subject of this evaluation reduce the margin of safety as defined in the basis for any technical specification?

The margin of safety of tornado missile barriers is not described in the basis of the Technical Specifications. The integrity of the RCB is fully maintained as a result of this evaluation. The containment internal design pressure is not affected by this evaluation.

Based upon the above, there is no unreviewed safety question.

Approved: 8/24/89

Unreviewed Safety Question Evaluation #89-037

Subject: Deletion of Desuperheating Water Metering Pumps from Auxiliary Boiler System

Description: Auxiliary Boiler desuperheating pumps are to be abandoned in place by designating pump isolation valves as "normally closed."

Safety Evaluation:

1) Does the subject of this evaluation increase the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report?

   Original design conservatively assumed superheated steam at the LWPS equipment inlet. Calculations and operating logs establish that heat losses in piping are such that steam is not superheated at the LWPS equipment inlet without operating the atemperator. Since design assumed desuperheated steam, deletion of the desuperheater does not increase the probability of occurrence or consequences of an accident or malfunction of equipment important to safety previously evaluated. The steam conditions without the desuperheater in service are consistent with the conditions assumed in the high energy line break analysis calculation in covering this line.

2) Does the subject of this evaluation create the possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report?

   The auxiliary boiler system is not considered in the accident analysis. The system does not supply steam to safety-related equipment. Therefore, this change does not create the possibility for an accident or malfunction different from those previously evaluated.

3) Does the subject of this evaluation reduce the margin of safety as defined in the basis for any technical specification?

   The auxiliary steam system does not supply any steam to any safety-related equipment and is not defined in the basis for any technical specification. Therefore, the change does not reduce the margin of safety.

Based upon the above, there is no unreviewed safety question.

Approved: 8/24/89

Unreviewed Safety Question Evaluation #89-062

Subject: Liquid and Gaseous Waste Processing Systems

Description: FSAR Section 11.2 has been revised for consistency and FSAR sections 11.2 and 11.3 have been revised for identification/update of vendor data.

Safety Evaluation:

1) Does the subject of this evaluation increase the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report?

   Changes made for consistency with vendor-provided design data do not affect the function, operability, or the integrity of the components of the Liquid Waste Processing System. The changes to reflect vendor design data do not affect the function, operability or integrity of the components of the RCS Vacuum Degassing System (RCSVDS). Therefore, none of the changes identified for the liquid waste processing and RCSVDS systems increase the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the FSAR.

2) Does the subject of this evaluation create the possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report?

   Since these changes do not affect the function, integrity, or operability of the components or the overall liquid and gaseous waste processing systems, this change does not create the possibility for an accident or malfunction of a different type than any evaluated previously in the FSAR.

3) Does the subject of this evaluation reduce the margin of safety as defined in the basis for any technical specification?

   These changes do not affect, or require any change to, the Technical Specifications. The proposed changes do not reduce the margin of safety as defined in the basis for any technical specification.

Based upon the above, there is no unreviewed safety question.

Approved: 8/30/89

Unreviewed Safety Question Evaluation #89-076

Subject: Steam Generators

Description: U-Bends of steam generator tubes are to be heat treated to relieve tensile stress.

Safety Evaluation:

1) Does the subject of this evaluation increase the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report?

   The heat treatment cycle proposed reduces the residual tensile stress, so the combination of residual and operational stress does not exceed the yield strength of the material. This reduces susceptibility to Primary Water Stress Corrosion Cracking. The accident evaluated in the FSAR for steam generator tube rupture postulates complete severance of a steam generator tube. The FSAR analysis is still bounding.

2) Does the subject of this evaluation create the possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report?

   As noted in WCAP-11928, the process does not adversely affect steam generator tube bundle integrity. Yield strength of the tubes is not adversely affected, no additional stresses are introduced, fatigue usage is minimal, plate stresses on the top support plate are acceptable, and oxide formation does not significantly affect the steam generator tube eddy current inspectability.

3) Does the subject of this evaluation reduce the margin of safety as defined in the basis for any technical specification?

   The process reduces the residual tensile stresses in the Row 1 and 2 U-Bend areas, reducing the susceptibility of the area to stress corrosion cracking. The margin of safety is increased rather than decreased.

Based upon the above, there is no unreviewed safety question.

Approved: 6/9/89

Unreviewed Safety Question Evaluation #89-082

Subject: Operator Actions List

Description: The Operator Actions List is to be revised to correct the location of a valve. It was properly identified and evaluated in the Appendix R calculations.

Safety Evaluation:

1) Does the subject of this evaluation increase the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report?

   The valve number and description of the operator action are correct, and adequate time exists to take operator action. Safe shutdown of the plant would not be jeopardized. Therefore, this change does not increase the probability of occurrence or consequences of an accident or malfunction of equipment important to safety.

2) Does the subject of this evaluation create the possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report?

   The valve location was correctly identified and evaluated in the Appendix R analysis. Therefore, this change does not create the possibility for an accident or malfunction of a different type than any previously evaluated.

3) Does the subject of this evaluation reduce the margin of safety as defined in the basis for any technical specification?

   The Appendix R analysis and operator actions list are a worst case analysis assuming complete loss of a fire area. There is ample margin of safety from the start of a fire to the condition analyzed. Also, there is ample time to perform the operator action. Therefore, this change does not reduce the margin of safety.

Based upon the above, there is no unreviewed safety question.

Approved: 5/15/90

Unr viewed Safety Question Evaluation #89-105

Subject: Health Physics Program

Description: This change includes change to facilities, instrumentation and equipment related to health physics and clarifies posting requirements for radiological hazards.

Safety Evaluation:

1) Does the subject of this evaluation increase the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report?

   The subject changes do not affect plant system operability, nor is there an effect on the ability of any equipment or program to perform the function for which it was designed. Therefore this change does not increase the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report.

2) Does the subject of this evaluation create the possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report?

   The subject changes do not affect plant systems, nor are any changes proposed that could create an accident or malfunction other than previously evaluated in the safety analysis report.

3) Does the subject of this evaluation reduce the margin of safety as defined in the basis for any technical specification?

   No changes in Technical Specifications are proposed, and the changes were not a basis for Technical Specification 3.11 or 6.12. Therefore, these changes do not reduce the margin of safety as defined in any technical specification.

Based upon the above, there is no unreviewed safety question.

Approved: 8/30/89

Unreviewed Safety Question Evaluation #89-132

Subject: Rod Cluster Control Assembly

Description: The FSAR is to incorporate the reanalysis of the Uncontrolled Rod Cluster Control Assembly Bank Withdrawal from a Subcritical or Low Power Startup Condition.

Safety Evaluation:

1) Does the subject of this evaluation increase the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report?

   The FSAR is to incorporate changes to a previously analyzed accident. Therefore, the probability of an accident is not increased. The accident analyzed is a Condition II event. The results of the analysis indicate that the design criteria are satisfied. Therefore, there is no increase in the consequences.

2) Does the subject of this evaluation create the possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report?

   The accident analyzed is a Condition II event. The Condition II design criteria ensure that these events do not propagate to cause a more serious fault. Results of the analysis show that the design criteria are satisfied. Therefore, this change does not create the possibility of a different type of accident or malfunction.

3) Does the subject of this evaluation reduce the margin of safety as defined in the basis for any technical specification?

   The FSAR changes show an increase in fuel average temperature. However, the results are still bounded by the acceptance limit. Therefore, the margin of safety is not reduced.

Based upon the above, there is no unreviewed safety question.

Approved: 8/30/89

Unreviewed Safety Question Evaluation #89-136

Subject: Rod Holdout Power Supply

Description: The voltage has been changed from "approximately 250 VDC" to "approximately 290 VDC."

Safety Evaluation:

1) Does the subject of this evaluation increase the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report?

   The subject voltage change will help to ensure rod holdout mechanism operation and so decrease the probability of occurrence of an accident. No change to the rod holdout mechanism is involved, so there is no increase in the consequences of any accident involving rod holdout. The increased voltage is within design limits of the rod holdout coil and circuit, so this will not increase probability of occurrence of a malfunction of the coil. Also the rod holdout system is not required as a safety system.

2) Does the subject of this evaluation create the possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report?

   The rod holdout operating voltage change does not affect or change any methods, procedure sequences, or system configurations. Therefore, this change does not create the possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report.

3) Does the subject of this evaluation reduce the margin of safety as defined in the basis for any technical specification?

   The changes in rod holdout voltage setting does not affect any section of the Technical Specifications or any system or equipment required by Technical Specification to be operable.

Based upon the above, there is no unreviewed safety question.

Approved: 8/24/89

Unreviewed Safety Question Evaluation #89-140

Subject: Anion and Mixed Bed Units - Makeup Demineralizer

Description: The subject system P&ID is being revised to delete uninstalled and unnecessary instrument isolation valves XDW 1301, 1302, 1308, and 1309.

Safety Evaluation:

1) Does the subject of this evaluation increase the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report?

   The makeup demineralizer is not safety-related, has no Safety Design Basis and is not necessary for safe shutdown of the plant. The system is not considered in the accident analyses and no credit is taken for system operability. Therefore, there is no increase in the probability of occurrence or consequences of an accident or malfunction previously evaluated.

2) Does the subject of this evaluation create the possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report?

   The valves to be deleted are not required for system function. Their purpose is isolation of a differential pressure switch which is still isolable, if necessary, by valves XDM 1300, 1304, 1307 and 1311. Since the function of the valves is served by others, this change does not create the possibility for an accident or malfunction of a different type than any previously analyzed.

3) Does the subject of this evaluation reduce the margin of safety as defined in the basis for any technical specification?

   The makeup demineralizer is not covered by Tech. Specs. and does not form the bases for any Tech. Spec. Therefore, the margin of safety is not reduced.

Based upon the above, there is no unreviewed safety question.

Approved: 12/14/89

Unreviewed Safety Question Evaluation #89-141

Subject: Environmental Qualification Criteria

Description: FSAR TAbles 3.11-1, "Environmental Conditions," and 9.4-1, "HVAC System Parameters," have been revised to be consistent with environmental qualification criteria.

Safety Evaluation:

1) Does the subject of this evaluation increase the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report?

   The increased temperature and pressure parameters were reviewed against existing equipment qualification packages. There is no physical impact on the qualification program as a result of these changes. Therefore, these revisions do not increase the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the FSAR.

2) Does the subject of this evaluation create the possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report?

   These changes did not result in any impact on the EQ program (except for some paper changes). Therefore, these changes do not create the possibility for an accident or malfunction of a different type than any evaluated previously in the FSAR.

3) Does the subject of this evaluation reduce the margin of safety as defined in the basis for any technical specification?

   These changes did not result in any impact on the EQ program (except for some paper changes). Therefore, this change does not reduce the margin of safety as defined in the basis for any technical specification.

Based upon the above, there is no unreviewed safety question.

Approved: 8/24/89

Unreviewed Safety Question Evaluation #89-142

Subject: Containment Penetrations

Description: Notes are added to FSAR Figure 6.2.4-1 (Sheets 6, 7, 8, and 9) to reflect design differences between Units 1 and 2. The figures were revised to show single block valves with threaded caps for vent and drain lines on each side of the penetration.

Safety Evaluation:

1) Does the subject of this evaluation increase the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report?

The piping specification allows use of threaded caps or blind flanges instead of second block valve as an equivalent design configuration (for critical piping) for the high pressure vent and drain lines. Double block valves are not required on safety class 2 lines to satisfy isolation requirements. The existing design shows the class break after the second isolation valve. This is not required and it would have been acceptable to have the break after the first isolation valve. A blind flange or threaded cap can be used in lieu of a second block valve for non-Class 1 lines. However, the blind flange or threaded cap does not constitute an isolation device or code class break. These equivalent design configurations serve no hydraulic functions and have no functional requirements within this safety class 2 portion of the feedwater system. The subject drain and vent connections are not required for the safe shutdown of the plant.

The modification to use one isolation valve in the drain line meets GDC 57 requirements. This change does not increase the probability of occurrence or the consequences of an accident or malfunction previously evaluated in the safety analysis report.

2) Does the subject of this evaluation create the possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report?

No physical changes to equipment, piping, or layout are proposed. The proposed change is only for consistency, and does not provide a basis for any new type of accident.

The double isolation valve configuration is not required to meet containment isolation requirements for safety class 2 lines. Therefore, use of a threaded cap in the Unit 2 design does not create the possibility for a new type of failure not previously considered since containment isolation requirements are met.

Unreviewed Safety Question Evaluation #89-142 (cont'd)

3) Does the subject of this evaluation reduce the margin of safety as defined in the basis for any technical specification?

Technical Specification 3/4.7 was reviewed. There is no Tech. Spec. requirement placed on feedwater system vent and drain lines. Therefore, the proposed change does not reduce the margin of safety in the basis for any technical specification.

Based upon the above, there is no unreviewed safety question.

Approved: 8/24/89

Unreviewed Safety Question Evaluation #89-152

Subject: CVCS Water Hammer

Description: The following corrective actions have been taken:

a) A new valve was added upstream of the orifice isolation valves to ensure leaktight isolation, and

b) A pressurization line was added from the excess letdown line to the letdown line downstream of the regenerative heat exchanger, but upstream of the orifice isolation valves.

(a) applies to Unit 2 only, since the unit was under construction at the time. The change to Unit 1 will be performed later. In the interim, Unit 1 incorporated corrective action (b), as did Unit 2.

Safety Evaluation:

1) Does the subject of this evaluation increase the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report?

The probability for water hammer in the letdown line (which could lead to a isolable SBLOCA inside containment) is decreased because this change provides a means to fill and depressurize the piping downstream of LCV-468 before opening LCV-465 and LCV-468. The consequences of such an accident are not changed because the function of LCV-465 and LCV-468 to isolate the break has not been affected.

On Unit 1, the letdown orifice isolation valves are closed in response to a Phase A isolation signal or a pressurizer low level signal, as described in the FSAR currently. On Unit 2, the letdown orifice header isolation valve is closed in response to these same signals. Since the letdown orifice valves are in parallel lines, there is no redundancy lost on Unit 2 with the single letdown orifice header isolation valve.

Unreviewed Safety Question Evaluation #89-152 (cont'd)

The pressurization line added between the excess letdown line and the letdown line is completely inside containment and has a remotely controlled valve providing normal closure and remote capability for opening should a void form following letdown termination. The letdown line and the excess letdown line are not needed for the safe shutdown of the plant, for accident mitigation, or for reactor coolant pressure boundary integrity. Isolation of the RCS may be accomplished using the letdown isolation valves (LCV-465 and LCV-468) on the letdown line and MOV-0082 and MOV-0083 on the excess letdown line.

2) Does the subject of this evaluation create the possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report?

The small-bore piping added (and added isolation valve in Unit 2) are ASME III Class 2 and Seismic Category I. Failure of the pressure boundary would be an isolable SBLOCA. Failure of the new isolation valve on Unit 2 to shut on demand has no adverse effect because letdown will be isolated by LCV-465 and LCV-468. If this valve fails to shut during operation, the excess letdown heat exchanger can be used to continue operation or perform a controlled shutdown as desired. All of these failures are covered by existing analyses.

3) Does the subject of this evaluation reduce the margin of safety as defined in the basis for any technical specification?

Operability of the letdown system is not addressed in Tech. Specs. directly. Use of letdown for purification is necessary in the long term to satisfy RCS chemistry limits in 3/4.4.7, but this change does not affect the ability to perform this function. The letdown system is used with the charging system to borate and deborate for reactivity control in normal operation, but the LCO's can be met without using normal letdown, and the capability of the system to perform this function has not been degraded.

Based upon the above, there is no unreviewed safety question.

Approved: 8/24/89

Unreviewed Safety Question Evaluation #89-153

Subject: Boron Dilution Reanalysis

Description: The FSAR is being revised to reflect the reanalysis performed by Westinghouse for the boron dilution event.

Safety Evaluation:

1) Does the subject of this evaluation increase the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report?

   The FSAR changes are a description of changes to a previously analyzed accident. Therefore, the changes do not increase the probability of an accident. The accident analyzed is a Condition II event. The Condition II design criteria prohibits fuel rod failures and RCS and secondary system over-pressurization. Satisfying Condition II event design criteria precludes the release of radioactivity. The results of the analysis show that the design criteria are satisfied. Therefore, there is no increase in consequences. This is consistent with the criteria in FSAR Section 15.4.6.4.

2) Does the subject of this evaluation create the possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report?

   The FSAR changes are a description of changes to a previously analyzed accident. As previously stated, the accident analyzed is a Condition II event. The Condition II design criteria ensure that these events do not propagate to cause a more serious fault. Results of the analysis show that the design criteria are satisfied. Therefore, these changes do not create the possibility of a different type of accident or malfunction.

3) Does the subject of this evaluation reduce the margin of safety as defined in the basis for any technical specification?

   The FSAR changes show an increase in the amount of time available for operator action. NUREG-0800 identifies a minimum time requirement if operator action is required to mitigate a boron dilution event. The changes satisfy the minimum time requirement. Since the changes show an increase in the amount of time available, the change increases the margin of safety.

Based upon the above, there is no unreviewed safety question.

Approved: 8/24/89

Unreviewed Safety Question Evaluation #89-159, Rev. 1

Subject: RHR Pump Motor Current Remote Indication

Description: This temporary modification provides an indication of RHR pump running current to the control room operators. This information will be used to monitor for air entrainment in the pump suction while in a mid-loop condition to prevent loss of core cooling due to cavitation.

Safety Evaluation:

1) Does the subject of this evaluation increase the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report?

This temporary modification is for monitoring purposes only, and will not impact performance of the Residual Heat Removal (RHR) system. Since the 1E cables are installed in accordance with all applicable standards, the signal cables do not impact on any 1E system connected via the same cable tray, or in the vicinity which might be impacted by failure of the signal cable. Therefore, no increase in the probability of occurrence of an accident previously evaluated in the Safety Analysis Report will occur. There is no change in the parameters governing loss of the RHR pump or the 1E signal cables, so there is no increase in the consequences of an accident previously evaluated in the SAR.

The temporary modification will install a current transformer around a single phase (two cables) of the power supply to the RHR motor in each train. The current transformer will have no impact on the RHR cable performance or its integrity. This temporary modification has no failure mode under which damage to the RHR power cable or the surrounding 1E cables will occur. Therefore, this temporary modification will not increase the probability of occurrence of a malfunction of equipment important to safety previously evaluated in the SAR.

Since the modification will only affect the RHR pump and its performance, and since loss of the RHR pump is already evaluated in the SAR, no new consequences will result from this temporary modification. Therefore, there is no increase in the consequences of a malfunction of equipment important to safety previously evaluated in the SAR.

Unreviewed Safety Question Evaluation #89-159 (Cont'd)

2) Does the subject of this evaluation create the possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report?

This temporary modification is for monitoring purposes only, and will not affect system performance or system response. Therefore, the modification does not create the possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report.

3) Does the subject of this evaluation reduce the margin of safety as defined in the basis for any technical specification?

This modification does not modify or increase RCS temperature or decay head load and it does not reduce the number of available RHR trains. Therefore, it does not reduce the margin of safety as defined in the basis for RHR requirements in the Technical Specifications.

Based upon the above, there is no unreviewed safety question.

Approved: 7/10/90

Unreviewed Safety Question Evaluation #89-161

Subject: Axial Heat Flux Distributions

Description: This FSAR change revises the description of inputs used for non-OTDT transients.

Safety Evaluation:

1) Does the subject of this evaluation increase the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report?

   The change does not increase the probability of these accidents. The accidents analyzed are ANS Condition II, III, and IV events. Condition II design criteria prohibit fuel rod failures and RCS/secondary system over-pressurization. Satisfying Condition II event design criteria precludes release of radioactivity. The Condition III and IV design criteria allow for some fuel rod failures. The results of the analyses show that the design criteria are satisfied. Therefore, there is no increase in consequences. The existing dose consequences analyses are still valid. This is consistent with the criteria in FSAR Section 15.2 and 15.4.3.

2) Does the subject of this evaluation create the possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report?

   The FSAR changes relate to previously analyzed accidents. The accidents analyzed are ANS Condition II, III, and IV events. The Condition II and III design criteria ensure that these events do not propagate to cause a more serious fault. The Condition IV design criteria ensures that long-term coolability of the core can be achieved. Results of the analyses show that the design criteria are satisfied. Therefore, these changes do not create the possibility of a different type of accident or malfunction.

Unreviewed Safety Question Evaluation #89-161 (cont'd)

3) Does the subject of this evaluation reduce the margin of safety as defined in the basis for any technical specification?

The FSAR presents plots of DNBR vs. time for the Section 15.3.1 and the Section 15.3.2 transient. The values for DNBR as stated in the FSAR are based on the results of the THINC III computer code. The THINC III code provides only approximate estimates of the transient DNBR. The THINC IV code is used to calculate the safety analysis value for DNBR. The calculated values satisfy the safety analysis limit criterion for the WRT-1 CHF correlation. Based on interpretation of the equivalency between the W-3 DNBR limit of 1.3 and the WRB-1 DNBR limit of 1.17, there is an increase in the margin of safety. Therefore, there is no reduction in the margin of safety.

Based upon the above, there is no unreviewed safety question.

Approved: 8/30/89

Unreviewed Safety Question Evaluation #89-163

Subject: Deletion of Solenoid Valves from Unit 2 Pressurizer Sample Lines

Description: Revise "NOTE 2" in the FSAR Figure 6.2.4-1, sheets 93 and 94 of 100, to reflect deletion of solenoid valves B2PS-FV-4450A and B2PS-FV-4451A in Unit 2.

Safety Evaluation:

1) Does the subject of this evaluation increase the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report?

   Removal of these valves does not increase the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety because these valves do not perform isolation of the RCB.

2) Does the subject of this evaluation create the possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report?

   Removal of these valves does not create the possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report. These valves are not required for any system function or for containment isolation, and thus removal of the valves does not affect system function or containment isolation.

3) Does the subject of this evaluation reduce the margin of safety as defined in the basis for any technical specification?

   Removal of these valves does not reduce the margin of safety for any Technical Specification. They are not required for containment isolation.

Based upon the above, there is no unreviewed safety question.

Approved: 8/24/89

Unreviewed Safety Question Evaluation #89-167

Subject: Revised Letdown Flow Range

Description: The purpose of this change is to revise the FSAR to reflect the revised letdown flow range (from 0-500 gpm to 0-300 gpm).

Safety Evaluation:

1) Does the subject of this evaluation increase the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report?

   The change in range of the letdown flow instrument and meter will enhance the ability of the operator to determine the letdown flow rate during normal plant operations and after an accident. It will have no effect on the probability or consequences of an accident. No hardware design changes are being implemented. The existing instrumentation is being rescaled to monitor a different range; therefore, the potential for malfunction of the equipment is unchanged. This change cannot affect the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety.

2) Does the subject of this evaluation create the possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report?

   The revision in the letdown flow instrumentation range will enhance the ability of the operator to determine the letdown flow rate after an accident. The letdown flow instrumentation range change will not create the possibility for a new type of accident.

3) Does the subject of this evaluation reduce the margin of safety as defined in the basis for any technical specification?

   No margin of safety of the bases of the Technical Specifications is affected by the change in the letdown flow instrumentation range. No Technical Specification identifies any condition regarding letdown flow.

Based upon the above, there is no unreviewed safety question.

Approved: 8/24/89

Unreviewed Safety Question Evaluation #89-168

Subject: Containment Normal Sump Pressure and Temperature

Description: This FSAR change corrects errors introduced into Table 9.3-3A, "Post-Accident Sample Description," which were incorporated by a previous revision (Amendment 58). There is no physical change to the plant or to the design basis. No design documents or analyses are affected.

Safety Evaluation:

1) Does the subject of this evaluation increase the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report?

   This change represents a descriptive change only; no physical, functional or design basis change is being implemented. The change has no effect on the probability of occurrence of a accident or malfunction, or on the consequences of any event which may occur.

2) Does the subject of this evaluation create the possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report?

   This change represents a descriptive change only; no physical, functional, or design basis change is being implemented. The change has no effect on the probability of occurrence of an accident or malfunction, or on the consequences of an event which may occur.

3) Does the subject of this evaluation reduce the margin of safety as defined in the basis for any technical specification?

   This change represents a descriptive change only; no physical, functional, or design basis change is being implemented. Moreover, no Technical Specifications establish a margin of safety based upon the PASS design conditions as stated in FSAR Table 9.3-3A.

Based upon the above, there is no unreviewed safety question.

Approved: 8/30/89

Unreviewed Safety Question Evaluation #89-170

Subject: NFPA Code Dates

Description: Code dates 1978 and 1983 for NFPA 14, and code date 1974 for NFPA 20, are to be added to the FHAR. Code dates are to be deleted from the FSAR.

Safety Evaluation:

1) Does the subject of this evaluation increase the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report?

   The code editions for the Fire Protection Program in the FSAR were for information only and commitments to specific code editions in the FHAR and SER were met or exceeded. Deletion of the code editions from the FSAR is for administrative convenience should code editions be revised. Therefore, the subject of this change does not increase the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the SAR.

2) Does the subject of this evaluation create the possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report?

   Tne code editions for the Fire Protection Program in the FSAR were for information only and commitments to specific code editions in the FHAR and SER were met or exceeded. Deletion of the code editions from the FSAR is for administrative convenience should code editions be revised. Therefore, the subject of this change does not create the possibility for an accident or malfunction of equipment of a different type than any evaluated in the SAR.

3) Does the subject of this evaluation reduce the margin of safety as defined in the basis for any technical specification?

   The code editions for the Fire Protection Program in the FSAR were for information only and commitments to specific code editions in the FHAR and SER were met or exceeded. Deletion of the code editions from the FSAR is for administrative convenience should code editions be revised. Therefore, the subject of this change does not reduce the margin of safety as defined in the basis for any technical specifications.

Based upon the above, there is no unreviewed safety question.

Approved: 8/30/89

Unreviewed Safety Question Evaluation #89-171

Subject: Category 1 Backfill

Description: Sand used in tests to verify backfill compaction will have a bulk density determined by ASTM standards.

Safety Evaluation:

1) Does the subject of this evaluation increase the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report?

   Review of bulk density measurements indicates a deviation of less than 1% for the three measurements used to average the bulk density. Using a maximum 1% deviation in the subject cases, all the tested backfill meets minimum compaction requirements. Since the backfill in question meets minimum design requirements, liquefaction potential, compressibility, and bearing capacity of the tested backfill is as previously analyze in the original design.

2) Does the subject of this evaluation create the possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report?

   Possible deviation in measurements of bulk density using these measurements was found to be less than 1%. Using the maximum deviation to reduce the single measurements addressed in the Nonconformance Report, compaction of the tested backfill was determined to be above minimum requirements. Liquefaction potential, compressibility, and bearing capacity of the tested backfill is as previously analyzed in the original design.

3) Does the subject of this evaluation reduce the margin of safety as defined in the basis for any technical specification?

   Backfill is not defined in technical specifications. There is no reduction in the margin of safety.

Based upon the above, there is no unreviewed safety question.

Approved: 8/24/89

Unreviewed Safety Question Evaluation #89-172

Subject: Category I Backfill

Description: Density of test sand (used to determine compaction of backfill material) was not determined per ASTM standards as specified in FSAR Section 2.5.4.5.6.2.3. Bulk density of test sand was determined with one measurement instead of averaging three measurements.

Safety Evaluation:

1) Does the subject of this evaluation increase the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report?

   Review of bulk density measurements indicates a deviation of less than 1% between the three measurements used for the average value. However, the backfill was found to exceed minimum compaction requirements (FSAR 2.5.4.5.6.2.4) with the test results lowered by the maximum 1% deviation. Since the backfill meets design requirements, there is no change in bearing capacity, consolidation, or liquefaction potential.

2) Does the subject of this evaluation create the possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report?

   The tested backfill was found to meet design requirements. There is no change in previous evaluations of backfill bearing capacity, compressibility, or liquefaction potential.

3) Does the subject of this evaluation reduce the margin of safety as defined in the basis for any technical specification?

   Backfill is not defined in technical specifications. There is no reduction in the margin of safety.

Based upon the above, there is no unreviewed safety question.

Approved: 8/24/89

Unreviewed Safety Question Evaluation #89-173

Subject: Qualified Display Processing System (QDPS) Software Modification

Description: Changes to the QDPS have been implemented to improve or correct aspects of the currently installed system.

Safety Evaluation:

1) Does the subject of this evaluation increase the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report?

   Externally, except where corrections have been made, the affected functions are unchanged; therefore, there is no increase in the probability of occurrence or consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report.

2) Does the subject of this evaluation create the possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report?

   Externally, except where corrections have been made, the affected functions are unchanged; therefore, the potential for a different type of accident or malfunction is not affected.

3) Does the subject of this evaluation reduce the margin of safety as defined in the basis for any technical specification?

   Functionally, operation is unaffected with respect to the plant safety analyses. These systems will provide the same output signals during the same events as they would currently. Therefore, the margin of safety is unchanged relative to the Technical Specifications.

Based upon the above, there is no unreviewed safety question.

Approved: 8/23/89

Unreviewed Safety Question Evaluation #89-174

Subject: AFW Pump Flow and Pressure Indication

Description: Permanent plant flow indication is to be installed at each AFW pump, and pressure indication is to be installed at the suction of the pumps.

Safety Evaluation:

1) Does the subject of this evaluation increase the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report?

   This modification adds local instrumentation to the auxiliary feedwater system to aid performing surveillance of the automatic recirculation valve in the discharge of the AFW pumps. It does not impact the functioning of the components that provide a safety function. The change does not impact the system's ability to provide the required AFW flow assumed in the accident analyses. Therefore, this modification will not increase the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety.

2) Does the subject of this evaluation create the possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report?

   This modification does not revise the design, function, or operability of the auxiliary feedwater system. It does not affect the safety or operability of the plant. Therefore, the change does not create the possibility for an accident or malfunction of a different type than any evaluated previously in the SAR.

3) Does the subject of this evaluation reduce the margin of safety as defined in the basis for any technical specification?

   The change does not reduce the margin of safety as described in the plant technical specifications because the tech. specs. do not govern flow verification through the recirculation line. The change does not affect the number of AFW pumps available or the required system flow.

Based upon the above, there is no unreviewed safety question.

Approved: 8/24/89

Unreviewed Safety Question Evaluation #89-175

Subject: Return of Water to the Floor Drain Tank from the Inorganic Basin

Description: Procedure OTCP13-WL-0001 provides a method of transferring contaminated water in the Inorganics Basin to the Floor Drain Tank in the Liquid Waste Processing System.

Safety Evaluation:

1) Does the subject of this evaluation increase the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report?

   A postulated release resulting from RHT failure has been evaluated in sections 15.7.3.1 and 2.4.13.3.2 of the FSAR. Concentrations of the radionuclides found constitute a small fraction of the source terms and volumes assumed in the calculations as described in the FSAR. All of the assumptions used in the analysis of the RHT failure are bounding for the evolution described. The RHT accident described in the FSAR assumes a complete full tank failure. The postulated failure of the transfer line and subsequent discharge of the entire contents of the Inorganics Basin to the environment uses the same pathways and has the same destination point as the evaluated RHT failure. Therefore, there is no increase in the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report.

2) Does the subject of this evaluation create the possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report?

   Although the source of the leakage described in the subject of this evaluation is different from the source postulated in the FSAR, the pathways and destination described in the FSAR are the same. The materials used for the transfer evolution are different from those described in the FSAR for LWPS; however, the temporary lines and fittings that will be used in the described evolution will be pressure tested prior to each use and the evolution will be continuously monitored, thereby reducing the probability and consequences of a failure. Total failure of the temporary line in the truck bay would have no adverse effects on internal flooding considerations as there is no safety-related equipment in the vicinity. No failure mechanism not previously analyzed has been identified.

Unreviewed Safety Question Evaluation #89-175 (Cont'd)

3) Does the subject of this evaluation reduce the margin of safety as defined in the basis for any technical specification?

This change routes liquid radwaste outside the scope of the LWPS system through the LWPS to the normal release pathways assumed by the ODCM and Technical Specifications. This change allows the liquid to be accounted for and quantified in accordance with Technical Specifications 6.9.1.3 and 6.9.1.4. There is no reduction in the margin of safety.

Based upon the above, there is no unreviewed safety question.

Approved: 8/22/89

Unreviewed Safety Question Evaluation #89-176

Subject: ECW FLow Rates and Flow Instrument Ranges

Description: FSAR Table 7.5-1 (RG 1.97 Conformance) is being revised to show required ranges for ECW flow instrumentation. This change revises documentation to conform with the existing plant physical configuration.

Chilled water system description is being revised to delete sentence giving ECW flow to chillers because this extent of detail is neither consistently provided, necessary, nor correct.

Safety Evaluation:

1) Does the subject of this evaluation increase the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report?

These changes represent a calibration change only, not a physical change to the hardware or tubing. The flow ranges have been verified as adequate for system function during preop testing and approximately one year of plant operation. Design flow rate were treated as minimums; actual flows were set slightly above design flow to provide a conservative margin. The post-accident monitoring instrument ranges were revised to cover, as a minimum, 110% of design flow (RG 1.97 criteria) and not be offscale during normal operation. This resulted in the instrument ranges identified in the FSAR change. These ranges provide adequate monitoring to ensure the system performs its intended function as addressed in the SAR. Therefore, the probabilities and consequences are unchanged.

2) Does the subject of this evaluation create the possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report?

ECW flows were verified as being adequate to perform system design functions during preop testing. Monitoring instrumentation has been recalibrated to properly monitor actual system flow rates, and thus perform its design function. There are no physical changes to the hardware or tubing; the instrumentation is performing the same functions as it did previously. Therefore, there is no new potential for any new accident or malfunction.

Unreviewed Safety Question Evaluation #89-176 (Cont'd)

3) Does the subject of this evaluation reduce the margin of safety as defined in the basis for any technical specification?

The ECW System flow rates were verified as adequate during preop testing. Specific flow rates and monitoring instrumentation ranges are not addressed in the Technical Specifications. Therefore, the Tech. Spec. margin of safety is unchanged.

Based upon the above, there is no unreviewed safety question.

Approved: 9/6/89

Unreviewed Safety Question Evaluation #89-177

Subject: Fresh Water System

Description: This change brings the Fresh Water System P&ID into agreement with field installations.

Safety Evaluation:

1) Does the subject of this evaluation increase the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report?

   The Fresh Water System is nonnuclear-safety-related. It performs no safety-related functions, nor does it support any safety-related equipment. Failure of the system will not degrade any safety functions or equipment. The consequences of an accident are not increased.

2) Does the subject of this evaluation create the possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report?

   The function of the Fresh Water System is to process well water. The water is used for drinking, and to fill the Fire Protection Water Storage Tanks. Since the Fire Protection Tanks are kept full, the fresh water system would not be required in the event of a fire.

3) Does the subject of this evaluation reduce the margin of safety as defined in the basis for any technical specification?

   The Fresh Water System is not part of any technical specification. It does not support any equipment required for safe shutdown. Therefore, failure of the system would not reduce the margin of safety of the technical specifications

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Based upon the above, there is no unreviewed safety question.

Approved: 8/30/89

Unreviewed Safety Question Evaluation #89-178

Subject: Regulatory Guide Matrix in FSAR

Description: Positions on Regulatory Guides 1.153, 1.155, and 1.157 are being added to FSAR Table 3.12-1.

Safety Evaluation:

1) Does the subject of this evaluation increase the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report?

   The subject of this evaluation does not increase the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report. Compliance with 10CFR50.63 as described in ST-HL-AE-3045 and subsequent submittals forms the basis for STPEGS conformance with Regulatory Guide 1.155. The implementation dates of Regulatory Guides 1.153 and 1.157 make them not applicable to STPEGS. No changes to plant operation or equipment are proposed.

2) Does the subject of this evaluation create the possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report?

   The subject of this evaluation does not create the possibility for an accident or malfunction for a different type than any evaluated previously in the safety analysis report. Conformance with 10CFR50.63 involves no changes in plant design.

3) Does the subject of this evaluation reduce the margin of safety as defined in the basis for any technical specification?

   The margin of safety as defined in the basis for Technical Specifications is not reduced since conformance to Regulatory Guide 1.155 is supported by existing plant operation and equipment.

Based upon the above, there is no unreviewed safety question.

Approved: 8/30/89

Unreviewed Safety Question Evaluation #89-179

Subject: Feedwater Heater Shell

Description: This change to FSAR Table 10.1-1 revises the outer diameter of the Feedwater (FW) Heater shell from 54" to 71".

Safety Evaluation:

1) Does the subject of this evaluation increase the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report?

   Performance duty of the FW Heater is not affected since shell outer diameter is not used in calculating the heat transfer rate (Btu/hr). Therefore, the plant heat balances are not affected. This change reflects the as-built status of the plant. There is no change in the function and operability of the heater drips, condensate, and extraction steam systems. This change does not increase the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report.

2) Does the subject of this evaluation create the possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report?

   Failure of the feedwater heater will not affect any safety-related system, component, or structure. The FW heater does not perform a safety function, and the ability to safely shutdown the plant is not affected.

3) Does the subject of this evaluation reduce the margin of safety as defined in the basis for any technical specification?

   This proposed change has no effect on the performance, function or operability of any system. The change does not reduce the margin of safety as defined in the basis for any technical specification.

Based upon the above, there is no unreviewed safety question.

Approved: 8/30/89

Unreviewed Safety Question Evaluation #89-180

Subject: Proposed Technical Specification Amendment

Description: This change deletes reference to the Radial Peaking Factor Limit Report, references the Core Operating Limits Report (COLR), changes the T. S. 6.9.1.6 WCAPs to proprietary reports, and provides the COLR to the NRC upon issuance. The amendment request was submitted on June 1, 1989, and approved July 31, 1989.

Unreviewed Safety Question Evaluation #89-181

Subject: Updated STPEGS Organization

Description: The STPEGS organization in FSAR Sections 12.1, 12.5 and 13.1 has been revised and updated.

Safety Evaluation:

1) Does the subject of this evaluation increase the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report?

   The subject of this evaluation is organizational in nature and does not increase the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety. All organizational elements are retained, with the exception of Plant Superintendent whose responsibilities are assumed by the Plant Manager. The Standard Review Plan (NUREG 0800), Section 13.1 is satisfied and the conclusions in the STPEGS Safety Evaluation Report are unchanged since no organizational functions have been removed. The intent of Regulatory Guide 1.70, Revision 2 regarding resumes is satisfied by FSAR Table 13.1-1, Education and Experience of Key Personnel Supporting STPEGS.

2) Does the subject of this evaluation create the possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report?

   The subject of this evaluation does not create the possibility for an accident or malfunction of a different type than previously evaluated in the safety analysis report. No organizational functions have been removed and qualification requirements for personnel are unchanged.

3) Does the subject of this evaluation reduce the margin of safety as defined in the basis for any technical specification?

   The basis for Technical Specifications (T.S.) is not affected by this proposed FSAR change, as no organizational descriptions in the T.S. are impacted by reorganization of the support staff. This reorganization of nonoperating personnel does not remove any organizational functions related to T.S. administrative controls.

Based upon the above, there is no unreviewed safety question.

Approved: 8/30/89

Unreviewed Safety Question Evaluation #89-182

Subject: Diesel Engine Fuel Oil Relief Valve

Description: This change to the diesel engine fuel oil relief valve conforms to the original design pressure requirements of the Diesel Fuel Oil System. The Diesel Fuel Oil System return line relief valve is designed to operate at 35 psia rather than 35 psig as currently shown. Changing the 35 psig relief setpoint to 20 psig correctly identifies the fuel oil return line relief pressure. The motor-driven fuel oil pump bypass relief valve is shown at 5 psig and should be corrected to show 50 psig.

Safety Evaluation:

1) Does the subject of this evaluation increase the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report?

The probability of occurrence of an accident previously evaluated in the Safety Analysis Report is not increased because the Standby Diesel Generators are accident mitigation devices and do not initiate accidents previously evaluated in the Safety Analysis Report. The consequences of an accident or malfunction of equipment important to safety previously evaluated in the Safety Analysis Report are not increased based upon the following:

The Standby Diesel Generators will perform their safety function to assist in mitigation of previously analyzed accidents with a single failure of one diesel train.

The Fuel Oil System is designed by Cooper Bessemer to have fuel oil delivered to the engine at 35 psi.

The change in relief valves from Cooper Bessemer P/N 1-01V-420-008 to 2-01V-495-004 provides the same pressure boundary integrity and reliability of operation. The only change is the opening setting changes from 35 psi to 20 psi.

The fuel oil pressure to the diesel engine is maintained at 35 psi, as it will now be a result of the 20 psi spring and a 15 psi static head on the relief valve discharge. The static head pressure is created because we have piped the relief valve discharge to the fuel oil storage tank located above the Standby Diesel Generator.

Unreviewed Safety Question Evaluation #89-182 (Cont'd)

2) Does the subject of this evaluation create the possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report?

No accidents of a different type than previously evaluated in the SAR are envisioned that would be initiated by the SDG's. By changing the setpoint to the fuel pump relief valve from 35 psi to 20 psi the fuel oil supply line pressure is reduced from 50 psi to 35 psi, which matches the design criteria. The FMEA Table 9.5.5-2 is not affected by this change. This change does not create the possibility of a different type of accident than previously evaluated in the SAR.

3) Does the subject of this evaluation reduce the margin of safety as defined in the basis for any technical specification?

The basis for T.S. 3/4.8.1 (A.C. Sources) was reviewed. The margin of safety, with regard to the Standby Diesel Generators, ensures that least two redundant trains of SDG's are available and operating during accident conditions with a single failure in the other train. The reliability of the Diesel Fuel Oil System is not reduced; therefore, the reliability of the Standby diesel Generators is not reduced. Thus, the margin of safety is not reduced.

Based upon the above, there is no unreviewed safety question.

Approved: 8/30/89

Unreviewed Safety Question Evaluation #89-183

Subject: Reload Safety Evaluation for STPEGS Unit 1, Cycle 2

Description: This evaluation for STPEGS Unit 1 Cycle 2 design demonstrates that insertion of reload fuel into the core will not adversely affect the health and safety of the public.

Safety Evaluation:

1) Does the subject of this evaluation increase the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report?

   The proposed change supports the fuel design for Unit 1 Cycle 2. The change does not change any plant equipment or procedures. Changes to the safety analysis have been addressed by other evaluations and found not to be an unreviewed safety question, bounded by the existing analyses, or the license was amended and approved by the NRC. Therefore, these changes do not increase the probability of an accident or malfunction of equipment important to safety. Since the Chapter 15 analysis is not impacted, the consequences of an accident (dose release) is not increased.

2) Does the subject of this evaluation create the possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report?

   Since the change is bounded by existing analyses in the safety analysis report, it does not create the possibility of an accident or malfunction of a different type than any evaluated previously in the safety analysis.

3) Does the subject of this evaluation reduce the margin of safety as defined in the basis for any technical specification?

   Since the Chapter 15 analysis is not impacted by the change, there is not a reduction in the margin of safety.

Based upon the above, there is no unreviewed safety question.

Approved: 9/12/89

Unreviewed Safety Question Evaluation #89-184

Subject: Painted Surface and Unqualified Coating Quantities Inside RCB

Description: This change to the FSAR updates the quantities of painted surfaces and unqualified coatings in the Unit 1 and Unit 2 Reactor Containment Buildings.

Safety Evaluation:

1) Does the subject of this evaluation increase the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report?

   The revised paint chip quantities in FSAR Table 6.1-4 do not increase the probability of occurrence or the consequences of an accident in the facility. The quantities of unqualified inorganic zinc has been increased. However, the original analysis for failed zinc coatings showed that the failed particle size is small with high density. Most particles will settle out before reaching the sump. Those that reach the sump are not a concern due to their small size and shape. Therefore, the increase in quantity of unqualified inorganic zinc does not change any analysis previously performed.

2) Does the subject of this evaluation create the possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report?

   As discussed above, there is no change in the evaluation of coatings previously considered since no failure condition was created which has not already been analyzed.

3) Does the subject of this evaluation reduce the margin of safety as defined in the basis for any technical specification?

   Since the change in quantities reflected in the calculations does not affect the analyses previously performed, there is no reduction in the margin of safety.

Based upon the above, there is no unreviewed safety question.

Approved: 8/30/89

Unreviewed Safety Question Evaluation #89-185

Subject: Peak Linear Heat Rate

Description: This change to the FSAR addresses an increase in peak linear heat rate for certain overpower transients.

Safety Evaluation:

1) Does the subject of this evaluation increase the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report?

   The change impacts only certain Condition II events. However, the change does not revise the acceptance limit or design criteria for these Condition II events. Satisfying the Condition II event design criterion precludes release of radioactivity. Since the Condition II event design criteria are satisfied, there is no increase in consequences.

2) Does the subject of this evaluation create the possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report?

   The FSAR changes describe a change to a limit evaluated in previously analyzed accidents. As previously stated, the accidents analyzed are Condition II events. The Condition II design criteria ensure that these events do not propagate to cause a more serious fault. Therefore, this change does not create the possibility of a different type of accident or malfunction.

3) Does the subject of this evaluation reduce the margin of safety as defined in the basis for any technical specification?

   As shown on Figure 3-1 of NSAC-125, the margin to safety is defined as the region above the acceptance limit but below the fuel failure point. The acceptance limit for STP is 22.6 kw/ft. The proposed change does not extend the peak linear heat rate kw/ft limit above the acceptance limit. Therefore, the margin of safety is not reduced.

Based upon the above, there is no unreviewed safety question.

Approved: 9/12/89

Unreviewed Safety Question Evaluation #89-186

Subject: Oily Waste Totalizer

Description: The present oily waste totalizer is to be replaced with one that is more reliable.

Safety Evaluation:

1) Does the subject of this evaluation increase the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report?

   The subject of this evaluation does not increase the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety because the modifications do not affect or modify the function of the system as described in the FSAR. The system P&ID is to be revised to reflect modification of piping flanges required for installation of the new totalizer; this change will allow the system to operate reliably as described in the FSAR.

2) Does the subject of this evaluation create the possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report?

   This change does not create the possibility for an accident or malfunction of a different type because the flow characteristics and system operating are unaffected by this change.

3) Does the subject of this evaluation reduce the margin of safety as defined in the basis for any technical specification?

   This change does not affect the margin of safety set down by the technical specifications. The subject system is not governed by any technical specification.

Based upon the above, there is no unreviewed safety question.

Approved: 9/6/89

Unreviewed Safety Question Evaluation #89-187

Subject: Radiation Monitoring Control Room Panel Plexiglass Covers

Description: Plexiglass covers were added to the subject panel to prevent inadvertent operation. These covers can now be removed since the affected pushbuttons have been deactivated.

Safety Evaluation:

1) Does the subject of this evaluation increase the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report?

   Removal of these covers does not increase the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety. The covers did not affect the operability of the subject system; their removal does not impact any previous analyses.

2) Does the subject of this evaluation create the possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report?

   Removing the pushbutton covers does not create the possibility for an accident or malfunction of a different type than any evaluated previously in the SAR. The panel was originally without the covers. The covers did not affect operability of the Radiation Monitoring System.

3) Does the subject of this evaluation reduce the margin of safety as defined in the basis for any technical specification?

   Removing the pushbutton covers does not affect operability of the radiation monitoring system, so the margin of safety as defined in the basis for the technical specifications is unaffected by this change.

Based upon the above, there is no unreviewed safety question.

Approved: 9/6/89

Unreviewed Safety Question Evaluation #89-188

Subject: Pipe Caps on CVCS Charging Pump Suction Line From RWST

Description: Pipe caps/plates have been added to the CVCS Charging Pump Suction Line from the RWST. This is a temporary modification.

Safety Evaluation:

1) Does the subject of this evaluation increase the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report?

   Tech. Spec. requirement of 33,000 gallons in the RWST in Mode 6 is still met with implementation of this temporary modification. In the event of loss of the cap or plate and loss of water through the ensuing openings, no safe shutdown equipment will be affected. The required availability of a borated water source/flowpath is met by the boric acid tank volume, and no RWST water is required. Flooding caused by loss of the caps/plates has no new consequences as it is already bounded by the flooding analyses in the design basis.

2) Does the subject of this evaluation create the possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report?

   Since the only consequence of this temporary modification is interruption of one flow path to the charging pumps (the required boric acid source will instead be the Boric Acid Tanks), no other impact will occur.

3) Does the subject of this evaluation reduce the margin of safety as defined in the basis for any technical specification?

   Since the basis for boration requires only one flow path to be available, and a flow path is available from the boric acid tank, there is no reduction in the margin of safety as designed in the bases for any technical specification when the temporary modification is limited to Mode 6.

Based upon the above, there is no unreviewed safety question.

Approved: 8/29/89

Unreviewed Safety Question Evaluation #89-189

Subject: Feedwater Isolation Valve (FWIV) Test Circuit)

Description: A time delay switch is to be added to the FWIV test circuit to act as a backup to the 90% limit switch. This is to ensure that the FWIV does not fully close during the valve stroke test to 90% open.

Safety Evaluation:

1) Does the subject of this evaluation increase the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report?

   This change has no effect on the probability of an FWIV failing to close when required, since the two Class 1E control circuits which receive the Feedwater Isolation ESFAS signal are unchanged. Therefore, the change has no effect on the existing transient analyses, since the FWIV's safety function and response to an actuation signal are unchanged. The change affects only the non-safety related FWIV test circuit, which cannot prevent the FWIV from closing when actuated by either of the redundant, safety-related circuits.

   Other than during the partial stroke test, this change will have negligible effect on the probability of an unwanted FWIV closure. Failure is enveloped by the existing analysis for Loss of Feedwater Flow (FSAR 15.2.7).

   It will not affect the probability of occurrence or consequences of any other event or malfunction previously analyzed. Also, since it is completely enveloped by the Loss of Feedwater analysis, it will not affect the radiological consequences of that event.

2) Does the subject of this evaluation create the possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report?

   Addition of the new relay does not introduce any new failure modes. Failures may result in an unsatisfactory test or unwanted closure of the FWIV, but will not result in false indication of a satisfactory test.

Unreviewed Safety Question Evaluation #89-189 (Cont'd)

The proposed change reduces the probability of an unwanted FWIV closure during quarterly partial stroke testing without introducing the possibility of new events or malfunctions.

3) Does the subject of this evaluation reduce the margin of safety as defined in the basis for any technical specification?

The margin of safety in the Technical Specifications is dependent upon the FWIVs' closure in response to an ESFAS signal, termination of feedwater flow to the steam generators, and maintenance of the containment isolation boundary. None of these functions are affected in any way by the proposed change.

The partial stroke test is required for ASME valve testing, but is not specifically referenced in the Technical Specifications.

Based upon the above, there is no unreviewed safety question.

Approved: 8/29/89

Unreviewed Safety Question Evaluation #89-192

Subject: Vibration Monitoring System for the Essential Chiller Compressors

Description: This modification adds a pair of eddy current probes to each of the 300-ton Essential Chilled Water System chiller compressors for the purpose of early detection of excessive compressor vibration.

Safety Evaluation:

1) Does the subject of this evaluation increase the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report?

   Mounting the probes on the thrust collar of the Essential Chiller compressors does not impact the ASME classification of the chillers or the seismic qualification of the chillers.

   The probes and protective covers do not represent credible missiles and do not require analysis according to the criteria of FSAR Section 3.5. The monitor cabinet will be mounted in the main control room with consideration for the seismic II/I requirements. The supports for the monitor cabinet will prevent its dislodging and damaging safety-related equipment during a seismic event. Fire protection and cable separation requirements will be maintained.

   The instrumentation added by these modifications does not affect the control logic of the Essential Chillers. As such, an alarm condition will not automatically shut down the chillers. The safety function of the chillers is therefore unaffected, and the Appendix R analysis is also not affected.

   Therefore, the changes proposed by these modifications do not increase the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety which have been previously evaluated in the safety analysis report.

2) Does the subject of this evaluation create the possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report?

   See response to #1. These changes do not create the possibility for an accident or for a malfunction of a different type than has been previously evaluated in the safety analysis report.

Unreviewed Safety Question Evaluation #89-192 (Cont'd)

3) Does the subject of this evaluation reduce the margin of safety as defined in the basis for any technical specification?

The proposed change does not inhibit operation of the chillers nor will it cause a chiller to automatically shut down. The Essential Chilled Water system will still provide sufficient cooling capacity for continued operation of safety-related equipment during normal and accident conditions. Therefore, the margin of safety is not reduced.

Based upon the above, there is no unreviewed safety question.

Approved: 9/27/89

Unreviewed Safety Question Evaluation #89-193

Subject: Diesel Fire Pump Batteries

Description: Diesel fire pump batteries are to be relocated to provide accessibility to the fire pump and prevent battery damage during maintenance activities.

Safety Evaluation:

1) Does the subject of this evaluation increase the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report?

   This change relocates the nonsafety diesel fire pump batteries within the same room and fire area/zone to prevent battery damage and enhance operability, availability and maintainability of the diesel fire pump/system. Battery relocation does not impact any safety or nonsafety functions of equipment/systems. Therefore, this change does not increase the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the SAR.

2) Does the subject of this evaluation create the possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report?

   Since the subject change does not affect the function or operability or any systems/equipment, it does not create the possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report. The FHAR is not affected because the batteries remain in the same Fire Area/Zone.

3) Does the subject of this evaluation reduce the margin of safety as defined in the basis for any technical specification?

   The fire protection system and the fire pump house are not governed by any technical specifications. This change is non-technical in nature and does not affect any technical specifications. Therefore, it does not reduce the margin of safety as defined in the basis for any technical specifications.

Based upon the above, there is no unreviewed safety question.

Approved: 9/19/89

Unreviewed Safety Question Evaluation #89-194

Subject: Boron Recycle System

Description: The BRS evaporator and the Boric Acid Batch Tank share a common steam inlet isolation valve. The valve must be open to batch boric acid. This temporary modification removes the valve and blanks off the Recycle Evaporator by isolating a downstream valve.

Safety Evaluation:

1) Does the subject of this evaluation increase the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report?

   The Boron Recycle System has no safety-related function and failure of the BRS does not compromise the capability of any engineered safety feature to mitigate the consequences of a design basis accident.

2) Does the subject of this evaluation create the possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report?

   The boron recycle system provides a means to recover boric acid from the primary system. Recovery of boric acid is not a plant operations requirement. Waste liquids can be processed using the LWPS evaporator.

3) Does the subject of this evaluation reduce the margin of safety as defined in the basis for any technical specification?

   The boron recycle system is not included or required in the technical specifications. The BRS is not referenced in any basis for a technical specification. Unavailability of the BRS will not reduce the margin of safety in the basis for any technical specification.

Based upon the above, there is no unreviewed safety question.

Approved: 9/12/89

Unreviewed Safety Question Evaluation #89-195

Subject: Installation of Main Transformer

Description: This modification replaces one of the two existing Main Transformers, from a McGraw-Edison manufactured transformer to a Westinghouse manufactured transformer. This change is required because the existing McGraw-Edison transformer has been installed in Unit 2 to replace a Main Transformer that experienced failure.

Safety Evaluation:

1) Does the subject of this evaluation increase the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report?

   Installation of the Westinghouse transformer does not impact or affect the previous safety evaluation since the basic function and operation of the Main Transformer has not changed for normal plant operation. On this basis, the subject of this evaluation does not increase the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report.

2) Does the subject of this evaluation create the possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report?

   Since the Westinghouse transformer is similar but not identical to the existing transformer, it was necessary to analyze the effects of parallel operation of two transformers with slightly different electrical characteristics. The results of these new analyses conclude that the current design bases are still valid and bounding. Therefore, installation of the Westinghouse Transformer does not impact or affect the previous safety evaluation since the function and operation of the Main Transformer have not been changed. For this reason, the subject of this evaluation does not create the possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report.

Unreviewed Safety Question Evaluation #89-195 (Cont'd)

3) Does the subject of this evaluation reduce the margin of safety as defined in the basis for any technical specification?

The Main Transformer is not described or addressed in the plant Technical Specification. Installation of the Westinghouse transformer has not changed the function and operation of the Main Transformer. Operation of the Westinghouse Main Transformer does not impact the Technical Specification 3/4.8 requirements for two physically independent offsite AC power sources. The Westinghouse transformer is functionally equivalent to the original McGraw-Edison transformer and thus does not alter the original plant design basis regarding the required number of available offsite power sources. Therefore, the subject of this evaluation does not reduce the margin of safety as defined in the basis for any Technical Specification.

Based upon the above, there is no unreviewed safety question.

Approved: 9/13/89

Unreviewed Safety Question Evaluation #89-196

Subject: Circulating Water System Seal Water Header Line

Description: A low point drain and isolation valve is to be added to Seal Water Header Lines.

Safety Evaluation:

1) Does the subject of this evaluation increase the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report?

   Failure of the Circulating Water System (CWS) does not prevent safe shutdown of the reactor. Failure of the drains would not cause flooding of the Circulating Water intake structure due to drains provided in each pump bay. Therefore, this change does not increase the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety.

2) Does the subject of this evaluation create the possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report?

   The CWS is not required to perform a safety function. Loss of Circulating Water will result in high condenser vacuum, turbine trip, and reactor trip. There is no accident or malfunction of a different type than any evaluated previously in the FSAR.

3) Does the subject of this evaluation reduce the margin of safety as defined in the basis for any technical specification?

   Loss of Seal Water, Circulating Water, or Circulating Water Pumps is not described in the basis of any Technical Specification. Therefore,t he subject of this evaluation does not reduce the margin of safety as defined in the basis for any Technical Specification.

Based upon the above, there is no unreviewed safety question.

Approved: 9/12/89

Unreviewed Safety Question Evaluation #89-197

Subject: LWPS Auxiliary Steam, Condensate, and Auxiliary Boiler Flushing

Description: This evaluation addresses flushing of radioactively-contaminated LWPS Auxiliary Steam Condensate, and Auxiliary Boiler inlet piping.

Safety Evaluation:

1) Does the subject of this evaluation increase the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report?

   Accidents associated with this change have been bounded by rupture of the holding tank. The concentrations of radioactive material sampled in the pipe to be flushed and the volume of water used in flushing at any one time is a fraction of that used in the accident analysis. Postulated failure of any piping or equipment used during flushing has the same pathways and destination as the evaluated RHT tank failure.

2) Does the subject of this evaluation create the possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report?

   Although rupture or failure of pipe or equipment during flushing will be a different flooding source than previously postulated, the pathway and destination of the release will be the same.

3) Does the subject of this evaluation reduce the margin of safety as defined in the basis for any technical specification?

   No changes to Technical Specifications are required as flushing water will be returned to its normal path (LWPS) as assumed in ODCM and technical specifications.

Based upon the above, there is no unreviewed safety question.

Approved: 9/19/89

Unreviewed Safety Question Evaluation #89-198

Subject: Steam Generator Primary Manway Closure Fasteners

Description: The Steam Generator primary manway cover bolts are to be replaced with studs and nuts. Westinghouse has completed an analysis which concludes that the studs are qualified for a forty-year design objective.

Safety Evaluation:

1) Does the subject of this evaluation increase the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report?

   The original and replacement fasteners were designed and evaluated using the ASME Code requirements and criteria, so that there is no increase in the probability of failure. Failure of one or two adjacent fasteners or washers has a consequence no worse than leakage past the gasket due to non-uniform load on the gasket. Experience has shown that a gasket leak is typically of the size which can be handled by normal plant leak detection and makeup systems. Therefore, use of studs, nuts, and washers in the steam generator primary manway closures will not increase the probability or consequences of a previously analyzed accident.

2) Does the subject of this evaluation create the possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report?

   The most severe hypothetical accident which could be caused by loss of fastener integrity is simultaneous or rapid failure of all or several of the fasteners on one closure. Such an accident would result in a loss of coolant bounded by existing small or large LOCA or steam line break safety analyses. Such an accident is not credible since the potential for failure of a fastener has not been increased by replacement of bolts with studs. Additionally, failure of a fastener will not lead to rapid failure of adjacent fasteners. Therefore, use of studs, nuts, and washers in the steam generator primary manway closures will not create the possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report.

Unreviewed Safety Question Evaluation #89-198 (Cont'd)

3) Does the subject of this evaluation reduce the margin of safety as defined in the basis for any technical specification?

Replacement of these bolts with studs meets the applicable requirements of the ASME Boiler and Pressure Vessel Code and does not affect performance or operability of the Steam Generator. Applicable Technical Specifications for the Steam Generator are 3/4.4.1 and 3/4.4.5. Requirements for Operational Leakage of the Reactor Coolant System are given in Technical Specification 3/4.4.6.2. These Technical Specifications and the respective bases are not affected by use of studs, nuts and washers for the Steam Generator primary manway closures. Therefore, the subject of this evaluation does not reduce the margin of safety as defined in the basis for any Technical Specifications.

Based upon the above, there is no unreviewed safety question.

Approved: 6/25/90

Unreviewed Safety Question Evaluation #89-201

Subject: Condensate System Seal Water Supply Tubing

Description: A drain valve is to be added to 3/8-inch seal water supply tubing.

Safety Evaluation:

1) Does the subject of this evaluation increase the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report?

   Addition of a drain valve on seal water supply tubing to valves LV 7244 and LV 7241 does not affect system operation or design. The system is nonsafety-related and serves no safety shutdown function. Therefore, the subject of this evaluation does not increase the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety.

2) Does the subject of this evaluation create the possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report?

   The added drain valve does not create the possibility for an accident or malfunction not previously evaluated since it is located in a nonsafety-related system which serves no safe shutdown function and consequently will have no impact on design basis transients or malfunctions.

3) Does the subject of this evaluation reduce the margin of safety as defined in the basis for any technical specification?

   The margin of safety is not reduced by this modification. The Tech. Spec. does not address the affected system in sufficient detail to be affected by this change. All materials and construction practices are in accordance with standard specifications/procedures.

Based upon the above, there is no unreviewed safety question.

Approved: 11/13/89

Unreviewed Safety Question Evaluation #89-202

Subject: Gaseous Waste Processing System

Description: A drain line and valve are to be added to a line from the Pressurizer Relief Tank.

Safety Evaluation:

1) Does the subject of this evaluation increase the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report?

   Addition of the subject line does not affect the system operation or design. The affected system is not safety-related and serves no safe shutdown function. Therefore, this change does not increase the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety.

2) Does the subject of this evaluation create the possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report?

   The added drain valve does not create the possibility for an accident or malfunction not previously evaluated since it is located in a nonsafety-related system which serves no safe shutdown function and consequently will have no impact on design basis transients or malfunctions.

3) Does the subject of this evaluation reduce the margin of safety as defined in the basis for any technical specification?

   The margin of safety is not reduced by this modification. The Tech. Spec. does not address the affected system in sufficient detail to be affected by this change. All materials and construction practices are in accordance with standard specifications/procedures.

Based upon the above, there is no unreviewed safety question.

Approved: 10/17/89

Unreviewed Safety Question Evaluation #89-203

Subject: Radiation Monitoring System (RMS)-Main Annunciator Windows

Description: Annunciator windows in the Control Room for RMS "Any Monitor in Alarm" and RMS "System Trouble" are to be deleted. Other alarms are available to serve this purpose.

Safety Evaluation:

1) Does the subject of this evaluation increase the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report?

   The change does not increase the probability of occurrence or the consequences of an accident or malfunction of any equipment, since it only affects the manner in which an existing problem is alarmed to the operators. This change does not affect the alarm functions provided to the Control Room operators via the RMS CRT. Implementation of this change will facilitate the operator's response to RMS alarms by directing his attention to a single place, the RMS CRT, from which the operator can take actions as required. This change simplifies operator response to events associated with the RMS. No capabilities and or functions are being modified by this change, other than deleting redundant alarm information.

2) Does the subject of this evaluation create the possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report?

   The functions of the RMS are unchanged; only the methods used for alarming are affected. Therefore the potential for a different type of accident or malfunction is not affected.

3) Does the subject of this evaluation reduce the margin of safety as defined in the basis for any technical specification?

   The functional operation of the RMS is not being modified by this change. The Technical Specifications do not address details as to how the monitoring functions are performed for the RMS. Therefore, the margin of safety is unchanged relative to the Technical Specifications.

Based upon the above, there is no unreviewed safety question.

Approved: 11/1/89

Unreviewed Safety Question Evaluation #89-204

Subject: Condenser Waterbox Draindown System Pumps and Piping

Description: Piping, fittings, and pumps are to be installed to allow condenser waterbox draindown to an alternate waterbox or approved outfall.

Safety Evaluation:

1) Does the subject of this evaluation increase the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report?

   The normal operation/function of the system is not affected. Addition of the draindown system does not increase the probability of an accident since the system is not required to perform any safety function and therefore is not required for safe shutdown of the plant. If a rupture leads to flooding in the Turbine Generator Building, such flooding would have no effect on operability of safety-related equipment.

2) Does the subject of this evaluation create the possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report?

   This modification does not affect systems required for safe shutdown of the plant. The effects of flooding and Appendix R are not required to be analyzed, and there are no new failure modes introduced.

3) Does the subject of this evaluation reduce the margin of safety as defined in the basis for any technical specification?

   The subject system and the TGB are not governed by any Tech. specs. The margin of safety is not reduced as the system and TGB are nonsafety/nonseismic Category I components/structures and are not required for accident mitigation.

Based upon the above, there is no unreviewed safety question.

Approved: 9/19/89

Unreviewed Safety Question Evaluation #89-205

Subject: PORC and NSRB Composition

Description: These proposed changes to the Technical Specifications would revise the composition of the PORC and the NSRB. A request for approval to include the changes in the Technical Specifications was submitted to the NRC by letter dated December 18, 1989 (ST-HL-AE-3216).

Unreviewed Safety Question Evaluation #89-206

Subject: Turbine Runback Disabled

Description: This temporary modification lifts wire leads to disable the Automatic Turbine Runback feature.

Safety Evaluation:

1) Does the subject of this evaluation increase the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report?

   Elimination of the Turbine Runback feature is bounded by the safety analysis. Therefore, its removal does not increase the probability of occurrence or consequences of an accident or malfunction of equipment important to safety.

2) Does the subject of this evaluation create the possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report?

   This change is bounded by analyses in the safety analysis report. Removal of the Automatic Turbine Runback feature would not create the possibility for an accident or malfunction not evaluated in the SAR.

3) Does the subject of this evaluation reduce the margin of safety as defined in the basis for any technical specification?

   The Automatic Turbine Runback feature is not required for plant safety and is therefore not considered in any safety analysis or basis for any Technical Specification.

Based upon the above, there is no unreviewed safety question.

Approved: 10/4/89

Unreviewed Safety Question Evaluation #89-208

Subject: Deaerator High Level Dump Lines

Description: Addition of a needle valve to deaerator high level dump lines will prevent water hammer in those lines by providing a small flow through a needle valve in parallel to the high level dump valve providing warming of the pipes.

Safety Evaluation:

1) Does the subject of this evaluation increase the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report?

   This change does not increase the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report, because the added piping is located on the 20 ft. elevation of the TGB and is remote from any safety-related components, systems, or structures, so there is no possibility that pipe whip, flooding, or jet impingement from the added pipe could affect any equipment needed for safe shutdown or accident mitigation. The added pipe is 1", so the existing feedwater line break analysis, based on a 36-inch line, is bounding.

2) Does the subject of this evaluation create the possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report?

   This change does not create the possibility of an accident or malfunction of a different type than any evaluated previously in the SAR. Possible accident or malfunction failures are addressed in (1).

3) Does the subject of this evaluation reduce the margin of safety as defined in the basis for any technical specification?

   This change does not reduce the margin of safety as defined in the basis for any technical specification, because the only portion of the feedwater system included in the technical specification are the containment isolation valves (feedwater isolation valves, feedwater isolation bypass valves, and preheater bypass valves) which are covered under technical specification 3/4.6.3. A small warm-up bypass line added to the deaerator high level dumps will have no effect on the portion of the feedwater system used for containment isolation.

Based upon the above, there is no unreviewed safety question.

Approved: 9/27/89

Unreviewed Safety Question Evaluation #89-209

Subject: Main Turbine Trip Interface

Description: This change revises the P&ID to retag and utilize existing installed spare instruments only.

Safety Evaluation:

1) Does the subject of this evaluation increase the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report?

   Pressure switches N1EH-PSL-6313A, B, C are being rewired to be used for turbine trip interface. These switches are nonsafety, Class III-type instruments. No safety related circuits are involved and safety previously evaluated in the safety analysis report is not affected by this change.

2) Does the subject of this evaluation create the possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report?

   This change does not create the possibility for an accident or malfunction because turbine trip interface is confined to nonsafety areas, and there is no change in the basic design.

3) Does the subject of this evaluation reduce the margin of safety as defined in the basis for any technical specification?

   Safety limits and limiting safety system settings as discussed in Section 2 of the Technical Specifications are not affected by this change. There is no reduction in the margin of safety.

Based upon the above, there is no unreviewed safety question.

Approved: 10/12/89

Unreviewed Safety Question Evaluation #89-210

Subject: Use of Service Water as a Cooling Supply for the Instrument Air Compressor and Aftercooler

Description: This temporary modification allows use of service water as the cooling water supply to the Instrument Air Compressor and aftercooler while the saltwater/freshwater heat exchanger is out of service.

Safety Evaluation:

1) Does the subject of this evaluation increase the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report?

The affected systems perform no safety function so that failure of these systems does not prevent safe shutdown of the reactor. Installation of temporary hoses will not impact the flood design. The Turbine Generator Building is not a building analyzed for the effects of internal flooding. In addition, flooding of the TGB has been evaluated based on rupture of a Circulating Water system expansion joint. Based upon this evaluation, there are no passageways, pipe chases, or cableways from the TGB to areas containing safety-related equipment that are below the plant design flood level or that are not floodproof, so flooding the TGB has no effect on operability of safety-related equipment.

2) Does the subject of this evaluation create the possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report?

This modification allows for a cooling water supply to the Instrument Air compressor and aftercooler in order to meet design specification. The change does not create the possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report. See (1) for the potential effects of using temporary hoses.

3) Does the subject of this evaluation reduce the margin of safety as defined in the basis for any technical specification?

The Closed Loop Coding Water System is not included or required by any Tech. Spec., nor is it referenced in a bases for a Tech. Spec. Unavailability of the system will not reduce the margin of safety in the basis for any Tech. Spec.

Based upon the above, there is no unreviewed safety question.

Approved: 9/29/89

Unreviewed Safety Question Evaluation #89-211

Subject: Alternate Time Delay Symbol

Description: The standard logic symbols are being revised to show an alternate time delay symbol.

Safety Evaluation:

1) Does the subject of this evaluation increase the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report?

   This change does not change the functional meaning of the symbol. There is no increase in the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report because no physical changes are being made, only the manner in which the functional requirements are being conveyed in order to avoid confusion between the functional requirements and the device itself.

2) Does the subject of this evaluation create the possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report?

   Use of the new symbol is intended to clarify the component's function. There is no change in functional requirements.

3) Does the subject of this evaluation reduce the margin of safety as defined in the basis for any technical specification?

   The subject change does not reduce the margin of safety as defined in the basis for any technical specification because it does not change any functional requirements.

Based upon the above, there is no unreviewed safety question.

Approved: 10/12/89

Unreviewed Safety Question Evaluation #89-212

Subject: Unit 1 Cycle 2 Core rating Limits Report

Description: The Core Operating Limits Report for Unit 1 Cycle 2 reports an increase in the Radial Peaking Factor.

Safety Evaluation:

1) Does the subject of this evaluation increase the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report?

   The parameter in question is a power peaking limit which does not increase the probability of an accident or the malfunction of equipment. The Fxy limits are used in the calculation of the Heat Flux Hot Channel Factor, F_Q. The F_Q limit is what is actually used in the safety evaluation and remains unchanged from cycle 1. Therefore, since F_Q remains unchanged as a result of this change, there is no increase in the probability of an accident or malfunction of equipment.

   RG 1.25 states that the minimum acceptable radial peaking factor for a PWR is 1.65. The appropriate radial peaking factor to use to calculate the fission product inventory of the damaged fuel assembly is F_H. Since the change in Fxy does not result in a change to F_H (1.52 for cycles 1 and 2), including uncertainty), the radial peaking factor value used for the design basis fuel handling accident is bounding. Therefore, since the radial peaking factor used in the existing analysis is unchanged, the radiological consequences as documented in FSAR Table 17.7-10 are bounding. Thus, there is no increase in consequences.

2) The subject of this evaluation create the possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report?

   The revision of Fxy does not create the possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report. Fxy is used in calculating the F_Q limit which is used in the safety analysis report. The F_Q limit is not changed by the change in Fxy.

Unreviewed Safety Question Evaluation # 89-212 (Cont'd)

3) Does the subject of this evaluation reduce the margin of safety as defined in the basis for any technical specification?

The revised Fxy limits result in F_Q's which are still below the Technical Specification limits. Limits are set on Fxy since it is Fxy that is evaluated to determine if $F_Q(z)$ is within its Tech. Spec. limit (T.S. 4.2.2.2). The value of Fxy does not appear in the safety analysis. It is used in the core design to confirm that actual F_Q's are below the F_Q limits set in Tech. Spec. 3.2.2 and used in the safety analysis.

Since the $F_Q(z)$ limit remains unchanged and the fuel design limits remain unchanged, there is no reduction in margin of safety as defined in the basis of any technical specification.

Based upon the above, there is no unreviewed safety question.

Approved: 10/04/89

Unreviewed Safety Question Evaluation #89-213

Subject: Steam Generator Tube Inspections

Description: During the steam generator tube eddy current inspections to meet the Technical Specification 4.4.5 surveillance requirements for Unit 1, indications of possible loose parts were found adjacent to some of the tubes. Additionally, one tube was found to have 27% degradation and one tube was found to have incomplete expansion rolling. Finally, during camera inspection of the steam generator tubesheets, other small, loose parts were found.

Safety Evaluation:

1) Does the subject of this evaluation increase the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report?

   Operation of the plant as is does not increase the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report.

   Chapter 15 of the FSAR addresses the consequences of a steam generator tube rupture incident. Assuming that these nonconforming conditions were significant enough to challenge the integrity of the tubes, the resulting incident and its consequences would be enveloped by the current analyses.

   With respect to the probability of occurrence of a steam generator tube rupture incident, these nonconforming conditions do not increase the probability because they do not challenge the integrity of the tubes. There is no concern that the tube will have degraded to an unsafe condition before the next eddy current inspection.

   There is no effect on the heat transfer capability of the tubes; therefore, there will be no impact to any accident analyses which utilize the heat transfer. No heat transfer effect occurs because degradation on the 27% tube is localized and the incomplete roll on the other tube occurs inside the tubesheet hole where it cannot have an effect on heat transfer.

2) Does the subject of this evaluation create the possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report?

   Operation of the plant as is does not create the possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report.

Unreviewed Safety Question Evaluation # 89-213 (Cont'd)

Since the only effect of deteriorating steam generator tubes is to cause primary to secondary leakage, the conditions described in this evaluation could not create a different type accident. Further tube wear occurring from the conditions described would most likely result in increasing primary to secondary leakage up to a point where the plant would be required to begin an orderly shutdown. Therefore, the Technical Specification limits on primary to secondary leakage would prevent the plant from operating in an unevaluated condition.

While a multiple tube failure incident is not enveloped by the Chapter 15 analysis, this type of incident is not likely because there is no detectable wear on any tubes except the 27% degraded tube. Additionally, this one tube has been evaluated as having adequate wall thickness margin to prevent tube rupture.

3) Does the subject of this evaluation reduce the margin of safety as defined in the basis for any technical specification?

Since the nonconforming conditions are not expected to affect the tube integrity, the margin of safety will not be reduced.

Since the detectable tube leakage in Unit 1 was zero throughout the first cycle, these tube imperfections are not contributing to any increasing leakage problems which might challenge the margin. Further, none of the nonconforming conditions are expected to result in any contribution to primary to secondary leakage.

Based upon the above, there is no unreviewed safety question.

Approved: 10/04/89

Unreviewed Safety Question Evaluation #89-214

Subject: Independent Technical Assessment 89-02, "Electrical Power Systems Design and Control Over Design Process"

Description: Technical Assessment 89-02 determined three discrepancies between calculations and FSAR Table 8.3-3. The FSAR table is being revised accordingly.

Safety Evaluation:

1) Does the subject of this evaluation increase the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report?

   The proposed change does not require a physical change to any plant equipment and does not require alteration of any equipment operating procedures. Calculation EC5002 correctly identifies the electrical loading requirements, including those loads that are the subject of this proposed change. The results of EC5002 were utilized as input to the existing plant safety analyses and standby diesel generator loading analyses, and thus the present analyses provide correct and bounding results. The proposed change makes minor alterations to the FSAR representation of the Standby Diesel Generator loading sequence but not to calculation EC5002. Therefore, the proposed change does not increase the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety as previously evaluated in the FSAR. This change does not change the ability of the standby generator to start in the event of a LOOP or SI signal, or to accept load within 10 seconds. Since all ESF loads are automatically connected to the SBDG, there is no increase in consequences. In addition, the dose analyses in Chapter 15 remain bounding.

2) Does the subject of this evaluation create the possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report?

   The proposed change does not require a physical equipment change or operating procedure modification, and present safety analyses and loading analyses utilizing calculation EC5002 input are correct and bounding. Therefore, the subject of this evaluation does not create the possibility of an accident or malfunction of a different type than any evaluated previously in the FSAR.

Unreviewed Safety Question Evaluation # 89-214 (Cont'd)

3) Does the subject of this evaluation reduce the margin of safety as defined in the basis for any technical specification?

The proposed change does not require a physical equipment change or operating procedure modification, and present safety analyses and loading analyses utilizing calculation EC5002 input are correct and bounding.

The proposed change does not impact the diesel generator availability requirements and periodic testing requirements as described in Technical specification 3/4.8.1. Therefore, the subject of this evaluation does not reduce the margin of safety as defined in the basis for any technical specification.

Based upon the above, there is no unreviewed safety question.

Approved: 10/18/89

Unreviewed Safety Question Evaluation #89-217

Subject: Peeling Pipe Lining

Description: This change removes the remaining neoprene lining from one (or more if additional damage is discovered) spool of Open Loop Auxiliary Cooling System (OC) pipe. This spool, located immediately downstream of the turbine lube oil cooling water temperature control valve, has an internal neoprene lining which has partially stripped off in service. The area immediately downstream of the control valve (TV-6200) may be coated with Belzona Super Metal. This would provide some protection to the pipe exposed to the highest velocity flow.

Safety Evaluation:

1) Does the subject of this evaluation increase the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report?

The subject of this evaluation does not increase the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report because the OC system is not used to mitigate any accident or malfunction analyzed in the SAR. The subject spool is located downstream of the turbine lube oil coolers where a failure in the spool would not affect flow through the coolers, so the probability of an accident sequence starting with a turbine trip is not increased. No failure of the subject spool is expected before the next refueling outage.

The nominal diameter of the subject spool is 16 inches, so the analyzed case of flooding from the 84-inch circulating water pipe envelopes the flooding consequences of any failure in the spool.

If the optional partial lining is applied, the small amount of the thin coating of Belzona Super Metal would not block flow if it flakes off in service. The flakes would end up in the MCR, where they would have no affect.

Unreviewed Safety Question Evaluation # 89-217 (Cont'd)

2) Does the subject of this evaluation create the possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report?

The subject of this evaluation does not create the possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report because removal of an internal protective coating from the pipe spool only affects the corrosion rate of the pipe, and the only possible consequence of corrosion is leakage or failure of the pipe. The consequences of pipe leakage or failure are enveloped by existing analysis as described in (1).

3) Does the subject of this evaluation reduce the margin of safety as defined in the basis for any technical specification?

The subject of this evaluation does not reduce the margin of safety as defined in the basis for any technical specification because the OC system is not described in any technical specification.

Based upon the above, there is no unreviewed safety question.

Approved: 10/04/89

Unreviewed Safety Question Evaluation #89-218

Subject: AMSAC Annunciator Point

Description: "AMSAC BYPASSED" on standard annunciator box 6M3-5A is to be moved to permissive status box 5M24-2D and the window renamed "C20 AMSAC BLOCKED." Jumper wires are to be installed in the annunciator relay cabinets to accomplish this change.

Safety Evaluation:

1) Does the subject of this evaluation increase the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report?

   This change increases operator understanding of the subject AMSAC status indication and reduces the probability of operator error. Display of permissive status lights is part of the annunciator permissive status lamp windows, not the plant annunciator alarm windows. "C20 AMSAC BLOCKED" will be displayed in the correct annunciator location, thus decreasing the possibilities of operator confusion when responding to alarms. Considering that alarm/indication status are not event initiators, and that the responses to events are the same as previously considered in the FSAR, no capabilities or functions are modified by this change.

2) Does the subject of this evaluation create the possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report?

   The intended function of this AMSAC status indication has not been changed. Only the location has changed from an annunciator box to a permissive status box. Therefore, it does not create the possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report. Neither the design intent or the functions of AMSAC are modified by this change.

3) Does the subject of this evaluation reduce the margin of safety as defined in the basis for any technical specification?

   AMSAC is not covered by the Tech. Specs. and relocation of this indication for AMSAC will have no impact on items covered by Tech. Specs. Therefore, the margin of safety as defined in the basis for any Tech. Spec. is not affected.

Based upon the above, there is no unreviewed safety question.

Approved: 10/11/89

Unreviewed Safety Question Evaluation #89-219

Subject: Modification of EAB Doors

Description: EAB doors 204, 207, and 211 are being changed from double-swing doors to single swing doors with transom panels. Doors 207 and 211 form boundaries of the Control Room envelope. Doors 204 and 207 form a fire area boundary.

Safety Evaluation:

1) Does the subject of this evaluation increase the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report?

   EAB doors 204 and 207 are required to meet 3-hour fire and control room envelope (pressure due to Halon discharge) requirements. The doors are designed to withstand a pressure of 2.2 psi. The doors are certified as 3-hour fire-rated doors in lieu of a UL label. Even though the doors are not labelled, their construction and fabrication meet or exceed the requirements for a 3-hour fire-labelled door. Door 211 is not in a Fire Zone or Fire Area Boundary, and thus is not required to be fire-rated. Doors 207 and 211 are provided with airtight seals to minimize air leakage. Thus, changes to these doors do not increase the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety.

2) Does the subject of this evaluation create the possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report?

   Doors 207 and 211 are provided with airtight seals to minimize air leakage. Door 211 is not required to be fire-rated and doors 204 and 207 are certified as 3-hour fire-rated doors. Therefore, this change does not create the possibility for an accident or malfunction of equipment important to safety of a type different than any evaluated in the SAR.

3) Does the subject of this evaluation reduce the margin of safety as defined in the basis for any technical specification?

   Based upon the previous discussion, the subject of this evaluation does not reduce the margin of safety as defined in the basis for Tech. Spec. 3/4.7.7.

Based upon the above, there is no unreviewed safety question.

Approved: 10/25/89

Unreviewed Safety Question Evaluation #89-220

Subject. Master Parts List

Description: The response to Generic Letter 83-28, Action Item 2.2.1, stated that the Master Parts List would be completed by August 25, 1991. The completion date is being changed to December 31, 1992.

Safety Evaluation:

1) Does the subject of this evaluation increase the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report?

Extension of the completion date for the Master Parts List will not have an adverse impact on STPEGS safety classification (quality classification) activities because the STPEGS Q-List is the master control document identifying structures, systems, and components that are safety-related.

There will be no adverse impact on the STPEGS safety classification (quality classification) of parts that make up permanent plant components/equipment because the parts are procured to the safety classification (quality classification) of the parent component/equipment. If a part is not procured to the same safety classification (quality classification) of the parent, an engineering evaluation is performed during the procurement process to assure the proper safety classification (quality classification) is assigned.

When the MPL is completed, it will provide additional information as to the safety classification (quality classification) of parts within a permanent plant component or piece of equipment. Additionally, completion of the MPL will not impact safety classification (quality classification) of work being performed on safety-related components/equipment because classification of the work is based on the safety classification (quality classification) of the component/equipment and not on the classification of any part that makes up that component/equipment.

At the present time, if a part must be procured and an approved MPL has not been completed, an engineering evaluation is performed to ensure the proper safety classification of that part is assigned.

Unreviewed Safety Question Evaluation # 89-220 (Cont'd)

Therefore, delaying completion of the MPL input has no impact on procurement of or work activities on safety-related components/equipment and all analyses for safety related systems are unchanged.

2) Does the subject of this evaluation create the possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report?

See (1). Therefore, the change does not create the possibility for an accident or malfunction of a different type than any evaluated previously in the SAR.

3) Does the subject of this evaluation reduce the margin of safety as defined in the basis for any technical specification?

Parts and components are properly evaluated to ensure correct safety classification and assurance that the safety component will function as designed. Therefore, all Technical Specification margins and LCO's are unaffected by extension of the completion dates of the MPL.

Based upon the above, there is no unreviewed safety question.

Approved: 10/25/89

Unreviewed Safety Question Evaluation #89-221

Subject: Logic Train Preparations for Installation of Excessive Cooldown Elimination

Description: This evaluation addresses the conditions which could occur during Modes 5 and 6 and address only those safety questions which might occur as a result of modification of those circuits that utilize any portion of the Logic Cabinets or that interface with the Logic Cabinets. Events postulated to occur during Modes 5 and 6 are a fuel handling accident in containment where a spent fuel assembly is dropped and the cladding damaged to the extent of allowing fission products release to the containment, overpressurization of the reactor coolant system in the cold shutdown mode, loss of RHR capability where core heating could occur, and loss of NIS Source Range.

Safety Evaluation:

1) Does the subject of this evaluation increase the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report?

   This Temporary Modification involves the ESF Actuation circuits (CVI) that respond to those conditions (High Rad monitor readings) which represent an accident. Modifying the ESF Actuation circuits does not change the probability of occurrence of an accident. The modification is designed to ensure that the response of the ESF Actuation circuitry to CVI duplicates the normal ESF Actuation circuitry in Modes 5 and 6. With the same response by the ESF Actuation circuitry, the consequences of an accident or malfunction of equipment important to safety are the same as in the normal configuration.

2) Does the subject of this evaluation create the possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report?

   No additional components will be installed nor will there be any rearrangement of components so seismic considerations are not a factor. The modification mimics the original design in order to provide the required redundancy. All modification wire changes will be in the combined Logic and Input Bay cabinets (for each train). The potential for fire is not increased by this

Unreviewed Safety Question Evaluation # 89-221 (Cont'd)

modification. In addition, the modification is designed so that only the circuits required are active during the period of the modification. Therefore, the possibility of some sort of ESF Actuation not intended (which could cause an accident or malfunction of a different type) is not possible.

3) Does the subject of this evaluation reduce the margin of safety as defined in the basis for any technical specification?

Since the modification duplicates the performance of the normal ESF Actuation methodology, the bases of Tech Specs for CVI (3/4.9.9) are not affected. Therefore, the margin of safety for CVI is not affected.

Based upon the above, there is no unreviewed safety question.

Approved: 11/01/89

Unreviewed Safety Question Evaluation #89-222

Subject: Standby Diesel Generator (SBDG) Lube Oil System Interlock (Unit 1)

Description: This change adds an interlock between the SBDG Standby Lube Oil Pump and the Circulating Lube Oil Pump.

Safety Evaluation:

1) Does the subject of this evaluation increase the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report?

   Addition of the control interlock between the standby and circulating lube oil pumps does not increase the probabilities of occurrence or consequences of an accident or malfunction. The interlock prevents simultaneous operation electrically which matches the existing check valve piping arrangement and is the original, normal and emergency, design intent of the system. The interlock does not perform a protective trip of the diesel generator during emergency or test conditions. The addition has no impact on RG 1.9 or NUREG/CR-0660.

2) Does the subject of this evaluation create the possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report?

   Addition of the interlock does not increase the possibility of an accident or a malfunction because the interlock only prevents simultaneous operation of the pumps which is the original design basis and now will not occur even with an improper start signal to the lube oil pump.

3) Does the subject of this evaluation reduce the margin of safety as defined in the basis for any technical specification?

   Since normal and emergency operation of the SBDG System is not affected by this change, the margin of safety as discussed in Tech. Spec. 3.8 and 4.8 is not affected.

Based upon the above, there is no unreviewed safety question.

Approved: 10/25/89

Unreviewed Safety Question Evaluation #89-223

Subject: Installation of a Temporary Monitor to the Rod Control Power Cabinets

Description: A high impedance sequence-of-events recorder is to be installed to test jacks that monitor the rod control cabinets' stationary coil voltage. This is a temporary modification.

Safety Evaluation:

1) Does the subject of this evaluation increase the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report?

   Design of the test circuit and work instructions will not change the probability of occurrence or consequences of such an accident or malfunction.

2) Does the subject of this evaluation create the possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report?

   Possible accidents and malfunctions are bounded by the SAR, so that this change will not create the possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report.

3) Does the subject of this evaluation reduce the margin of safety as defined in the basis for any technical specification?

   For the reasons given above, this change does not reduce the margin of safety as defined in the basis for any technical specification.

Based upon the above, there is no unreviewed safety question.

Approved: 10/15/89

Unreviewed Safety Question Evaluation #89-223

Subject: Installation of a Temporary Monitor to the Rod Control Power Cabinets

Description: A high impedance sequence-of-events recorder is to be installed to test jacks that monitor the rod control cabinets' stationary coil voltage. This is a temporary modification.

Safety Evaluation:

1) Does the subject of this evaluation increase the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report?

   Design of the test circuit and work instructions will not change the probability of occurrence or consequences of such an accident or malfunction.

2) Does the subject of this evaluation create the possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report?

   Possible accidents and malfunctions are bounded by the SAR, so that this change will not create the possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report.

3) Does the subject of this evaluation reduce the margin of safety as defined in the basis for any technical specification?

   For the reasons given above, this change does not reduce the margin of safety as defined in the basis for any technical specification.

Based upon the above, there is no unreviewed safety question.

Approved: 10/15/89

Unreviewed Safety Question Evaluation #89-224

Subject: Main Turbine Stress Response Test

Description: Test ITEP07-TM-0002 directs the main turbine to be run at different loads under normal and abnormal conditions to ensure no stress limits are exceeded following repair of cracks in stationary blades.

Safety Evaluation:

1) Does the subject of this evaluation increase the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report?

   The Main Turbine performs no safety function; therefore, failure would not prevent a safe shutdown. This test will not increase the probability of occurrence of an accident because the Main Turbine is not important to safety as evaluated by the safety analysis, and the Main Turbine will not be operated in any condition not already analyzed. This test uses approved plant procedures as a basis, and is for data acquisition only.

2) Does the subject of this evaluation create the possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report?

   This test does not create the possibility for an accident or malfunction of a different type because no limits or limiting parameters previously analyzed are to be exceeded. This is a data gathering procedure only.

3) Does the subject of this evaluation reduce the margin of safety as defined in the basis for any technical specification?

   The Main Turbine is not included in the Tech. Specs. Performance of this test will not reduce the margin of safety.

Based upon the above, there is no unreviewed safety question.

Approved: 10/17/89

Unreviewed Safety Question Evaluation #89-225

Subject: ECW Pond Level Instruments

Description: The P&ID's are being revised to reflect actual ECW pond level instrumentation. The instruments are used for verification of proper ECW pond level to comply with Technical Specifications.

Safety Evaluation:

1) Does the subject of this evaluation increase the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report?

   This change only affects representation of the instruments on the drawings and does not affect the function of the instruments as presently shown. The instruments are not safety-related and are not used for accident mitigation or post-accident monitoring.

2) Does the subject of this evaluation create the possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report?

   This instrumentation is not interfaced to any safety-related equipment or accident mitigation systems. The ECW pond level can be read locally if the instrumentation is lost.

3) Does the subject of this evaluation reduce the margin of safety as defined in the basis for any technical specification?

   The ECW pond level can be read locally if the instrumentation is lost. The changes does not reduce the margin of safety as defined in the basis for any technical specification.

Based upon the above, there is no unreviewed safety question.

Approved: 12/27/89

Unreviewed Safety Question Evaluation #89-226

Subject: Large Break Analysis Results/Maximum Local Zr/H_2O Reaction

Description: This change alters the location of the maximum Zr/H_2O reaction for the Double-Ended Cold Leg Guillotine break with a discharge coefficient of 0.6. This change affects FSAR Table 15.6-7.

Safety Evaluation:

1) Does the subject of this evaluation increase the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report?

   This change addresses an information-only value from an analysis of an accident discussed in the FSAR. Since plant equipment and procedures are not changed, this change does not increase the probability of an accident assumed in the FSAR. Since the margin of safety is not reduced, the value being changed does not affect the consequences (dose) of this accident.

   Since plant equipment and procedures are not changed, this change does not increase the probability or consequences of equipment failure as assumed in the FSAR.

2) Does the subject of this evaluation create the possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report?

   This change addresses an information-only value from an analysis of an accident discussed in the FSAR. Since plant equipment and procedures are not changed, this change does not create the possibility of an accident or equipment function different than assumed in the FSAR.

3) Does the subject of this evaluation reduce the margin of safety as defined in the basis for any technical specification?

   Since only the location where the peak Zr/H_2O reaction occurs and not the amount is changed, this change does not reduce the margin of safety associated with the Large Break LOCA event.

Based upon the above, there is no unreviewed safety question.

Approved: 10/25/89

Unreviewed Safety Question Evaluation #89-227

Subject: Increase in Auxiliary Feedwater Flow to Faulted Steam Generator During a Steamline Break Accident

Description: The purpose of this document is to justify the change in the AFW flow to the faulted steam generator for the Main Steam Line break (MSLB) accident. This change affects Question 440.59N.

Safety Evaluation:

1) Does the subject of this evaluation increase the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report?

   This change addresses an assumption used in the analysis of an accident discussed in the FSAR. The change affects an assumed value after accident initiation. No change in the assumed cause of the accident is affected. Since plant equipment and procedures are not changed, this change does not increase the probability of an accident or equipment failure assumed in the FSAR.

   Based on the evaluation performed by Westinghouse, the increased AFW flow does not reduce the margin of safety as discussed above. Therefore, the consequences (dose) of this accident are not increased due to this change.

   While this change does increase the AFW flow assumed due to a AFW flow controller failure, the accident consequences are not increased. Therefore, this change does not increase the consequences of an equipment malfunction.

2) Does the subject of this evaluation create the possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report?

   Since plant equipment and procedures are not changed, this change does not increase the possibility of an accident of a different type than in the FSAR. Since plant equipment, procedures, and licensing basis analysis are not changed, this change does not increase the possibility of a different type of malfunction than in the FSAR.

Unreviewed Safety Question Evaluation # 89-227 (Cont'd)

3) Does the subject of this evaluation reduce the margin of safety as defined in the basis for any technical specification?

The Acceptance Criteria for DNBR and brittle fracture are met with this change. Technical Specification Basis 3/4.2.5 is met with regard to meeting the DNBR safety analysis limit. There is no Technical Specification dealing with cooldown due to a MSLB accident. Therefore, there is no reduction of the margin of safety.

Based upon the above, there is no unreviewed safety question.

Approved: 10/25/89

Unreviewed Safety Question Evaluation #89-228

Subject: Moderator Density Coefficient

Description: This change revises Table 15.0-2 and deletes Figure 15.0-6 which pertain to the Rod Cluster Control Assembly misalignment accident.

Safety Evaluation:

1) Does the subject of this evaluation increase the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report?

   This change removes figures and references not applicable to STP. As such, it cannot increase dose rates of previously analyzed accidents. Since plant equipment and procedures are not changed, this change does not increase the probability or consequences of an accident assumed in the FSAR.

   The change cannot cause a malfunction of equipment. Therefore, this change does not increase the probability of occurrence or the consequences of an equipment malfunction.

2) Does the subject of this evaluation create the possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report?

   This change removes figures and references not applicable to STP. Since plant equipment and procedures are not changed, this change does not increase the possibility of an accident of a different type than in the FSAR.

   Since plant equipment and procedures are not changed, this change does not increase the possibility of a different type of malfunction than in the FSAR.

3) Does the subject of this evaluation reduce the margin of safety as defined in the basis for any technical specification?

   As such, it cannot reduce the margin of safety for any accident in the FSAR. Therefore, this change does not reduce the margin of safety as defined in the basis for any Technical Specifications.

Based upon the above, there is no unreviewed safety question.

Approved: 10/25/89

Unreviewed Safety Question Evaluation #89-229

Subject: Class 1E Battery Chargers

Description: This change revises the ERFDADS computer and ESF status monitoring to reduce nuisance/duplicate alarms and display indications for the operator.

Safety Evaluation:

1) Does the subject of this evaluation increase the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report?

   This change only affects the battery charger alarming condition and does not alter the normal operating line-up of the battery chargers in any way. Safety-related equipment or functions are not affected. There is no increase in the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report.

2) Does the subject of this evaluation create the possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report?

   This change does not affect the normal operating lineup of the battery chargers. The change does not create the possibility for an accident or malfunction of equipment important to safety of a different type than any evaluated previously in the safety analysis report.

3) Does the subject of this evaluation reduce the margin of safety as defined in the basis for any technical specification?

   The margin of safety is not reduced because the alarm conditions for the battery chargers are being changed to do away with nuisance alarms. The normal operating lineup of the chargers is not being changed.

Based upon the above, there is no unreviewed safety question.

Approved: 11/15/89

Unreviewed Safety Question Evaluation #89-230

Subject: Instrumentation Drift and Calorimetric Errors

Description: This change removes FSAR Table 15.0-5 and alters the text of Section 15.0.7. Table 15.0-5 discusses the basis for the Maximum Overpower Trip setpoint error used by Westinghouse for the analyses which utilize the Maximum Overpower Trip. Table 15.0-5 lists this error as 9%. The nominal value of the Maximum Overpower trip is 109%. The setpoint error is added to the nominal value to yield an analysis value of 118% of Rated Thermal Power (RTP). The text change to Section 15.0.7 reflects deletion of Table 15.0-5 and refers to WCAP 11273.

Safety Evaluation:

1) Does the subject of this evaluation increase the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report?

   This change discusses a value that is used only after an accident has been initiated. The assumed initiating event has not been altered due to this change. Therefore, the probability of the occurrence of an accident is not increased due to this change.

   This change does not alter any safety analysis initial conditions or transient scenarios. None of the safety analyses are affected by this change. Therefore, this is no increase in the consequences of any previously evaluated SAR accident.

   This change does not alter any parameter associated with equipment important to safety. None of the safety analyses are affected by this change. Therefore, there is no increase in the probability of equipment malfunction for any previously evaluated SAR accident.

   This change does not alter any parameter associated with any previously analyzed SAR accident. Since this change does not affect any SAR accident, the effects of equipment malfunction as currently stated in the SAR are still bounding. Therefore, there is no increase in the consequences of equipment malfunction for any previously evaluated SAR accident.

Unreviewed Safety Question Evaluation # 89-230 (Cont'd)

2) Does the subject of this evaluation create the possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report?

This change does not alter any parameter associated with any previously analyzed SAR accident. Additionally, this change does not alter any plant equipment or procedures. Since this change does not affect any safety analysis parameter, plant equipment, or plant procedures, this change does not create the possibility of a different type of accident or malfunction of safety-related equipment.

3) Does the subject of this evaluation reduce the margin of safety as d fined in the basis for any technical specification?

This change does not affect the inputs to any SAR analysis. Therefore, there is no change in the reported results for any SAR analysis and no change in the associated margin of safety as defined for any Technical Specification.

Based upon the above, there is no unreviewed safety question.

Approved: 11/13/89

Unreviewed Safety Question Evaluation #89-231

Subject: Standby Diesel Generator Lube Oil System Interlock (Unit 2)

Description: This change adds an interlock between the SBDG Standby Lube Oil Pump and the Circulating Lube Oil Pump

Safety Evaluation:

1) Does the subject of this evaluation increase the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report?

   The interlock prevents simultaneous operation of the two pumps - this matches the existing check valve piping arrangement and is the original, normal and emergency, design intent of the system. Since the interlock does not perform a protective trip of the diesel generator during emergency or test conditions, the addition has no impact on RG 1.9 or NUREG/CR-0660. Therefore, this change does not increase the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report.

2) Does the subject of this evaluation create the possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report?

   Addition of the interlock does not increase the possibility of an accident or a malfunction because the interlock only prevents simultaneous operation of the pumps which is the original design basis and now will not occur even with an improper start signal to the lube oil pump.

3) Does the subject of this evaluation reduce the margin of safety as defined in the basis for any technical specification?

   The normal and emergency operation of the SBDG system is not affected by this change. Therefore, the margin of safety is not reduced.

Based upon the above, there is no unreviewed safety question.

Approved: 10/25/89

Unreviewed Safety Question Evaluation #PQ-232

Subject: Mechanical Auxiliary Building Main Air Supply Heaters

Description: The subject heaters are to be temporarily returned to service to cope with sub-50°F outside air temperatures encountered during winter operations.

Safety Evaluation:

1) Does the subject of this evaluation increase the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report?

   The proposed change impacts only the nonsafety-related portion of the MAB HVAC system. The Supplementary Coolers, which are required to function during the response to a Design Basis Accident (DBA), are not affected by this change. The configuration of the heaters as proposed will not create a new mode of failure for the heaters and will not affect the Failure Modes and Effects Analysis for the Supplementary Coolers. MAB equipment important-to-safety will not need to operate with a bulk air temperature that is less than 50°F (the temperature indirectly assured in the DBAs) once the proposed change is implemented. This equipment will not be further challenged by operation of the heaters as proposed. The proposed change does not increase the probability of occurrence of an accident or a malfunction of equipment important to safety that has been previously analyzed in the FSAR.

2) Does the subject of this evaluation create the possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report?

   See (1). Therefore, the proposed change does not create the possibility of an accident or a malfunction of equipment important to safety that has not been previously evaluated in the FSAR.

Unreviewed Safety Question Evaluation # 89-232 (Cont'd)

3) Does the subject of this evaluation reduce the margin of safety as defined in the basis for any technical specification?

The Technical Specifications do not discuss operation of the MAB Main Air Supply Heaters. The MAB HVAC system is important to the requirements for area temperature monitoring, and the Supplementary Coolers are required to maintain those Technical Specifications. However, the proposed change does not affect operation of the Supplementary Coolers. Therefore, the margin of safety as defined in the bases of the Technical Specifications is not reduced as a result of the proposed change.

Based upon the above, there is no unreviewed safety question.

Approved: 11/01/89

Unreviewed Safety Question Evaluation #89-233

Subject: Redundant Vapor Extractors

Description: Redundant vapor extractors are to be added to the Turbine Generator lubricating oil reservoir and loop seal oil tank. These redundant vapor extractors will remove hydrogen and other potentially volatile vapors from the oil reservoir, loop seal oil tank and bearing pedestals.

In addition, the vapor extractor alarm scheme is to be revised to provide an individual alarm window on the Turbine Generator Building operator station panel for each vapor extractor instead of on one for both extractors.

Safety Evaluation:

1) Does the subject of this evaluation increase the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report?

Addition of vapor extractors does not increase the probability of occurrence of an accident as previously evaluated in the Safety Analysis Report. The vapor extractors are not safety-related and do not interface with components or systems that are safety-related. Failure of the vapor extractors will not affect seismic II/I, HELBA, MELBA and EQ programs. The effect on the FHAR, due to increased cable load on one fire zone, has been evaluated and has been found not to affect the Appendix R analysis.

Addition of vapor extractors does not increase the consequences of an accident previously evaluated in the SAR. The vapor extractors are not needed for safe shutdown. Their failure will not cause accidents previously evaluated nor contribute to the consequences of these accidents.

Addition of vapor extractors will increase the reliability and availability of the Turbine Generator which is required by the manufacturer to be shut down if vapor extractors are not available. The extractors and Turbine Generator are not needed for plant safe shutdown. Failure of the extractors will not increase the probability of occurrence of a malfunction of equipment important to safety.

Unreviewed Safety Question Evaluation # 89-233 (Cont'd)

Addition of vapor extractors will not increase the consequences of a malfunction of equipment important to safety. The extractors do not interface with any safety-related equipment or equipment necessary to maintain safe shutdown conditions.

The change in the alarm scheme does not affect the function of any equipment or system since it involves an alarm function only. A control room design review is not required because the affected alarms are on a local panel only.

2) Does the subject of this evaluation create the possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report?

Addition of vapor extractors will not create the possibility of an accident of a different type than previously evaluated in the SAR. The proposed change is being installed to the same Codes, Standards, and Specifications as the original plant. The impact of routine additional cables is discussed.

The vapor extractors are not safety-related, do not perform any safe shutdown functions and do not interface with equipment important to safety. Their failure will necessitate shutdown of the turbine-generator (per manufacturer's requirement) which is not required for safe shutdown.

The change in the alarm scheme does not affect the function of any equipment or system since it involves an alarm function only. A control room design review is not required because the affected alarms are on a local panel only.

3) Does the subject of this evaluation reduce the margin of safety as defined in the basis for any technical specification?

The redundant vapor extractors are not the subject of/or the basis for any Technical Specifications and this change does not reduce the margin of safety as defined in the basis for any Technical Specifications.

Based upon the above, there is no unreviewed safety question.

Approved: 2/26/90

Unreviewed Safety Question Evaluation #89-234

Subject: Auxiliary Feedwater Pumps

Description: This change provides an interlock on the ERFDADS computer to inhibit alarms for indicated low AFW pump discharge pressure when the AFW pumps are off.

Safety Evaluation:

1) Does the subject of this evaluation increase the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report?

   The subject of this evaluation does not increase the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety. This change does not impact the system ability to provide the required AFW flow to the SG in case of accident or cause malfunction to system components that provide the safety function. This change increases operator understanding of the AFW alarms by providing valid alarms in the control room. Alarms to the operator are not event initiators; therefore, there is no increase in the probability of an accident or malfunction of equipment.

2) Does the subject of this evaluation create the possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report?

   The subject of this evaluation does not create the possibility for an accident or malfunction of a different type than any evaluated previously in the SAR. This change does not impact the safety or the operability of the AFW system. Alarms are an aid to the operator only and are not event initiators; therefore, there is no increase in the probability of an accident of any type.

3) Does the subject of this evaluation reduce the margin of safety as defined in the basis for any technical specification?

   The subject of this evaluation does not reduce the margin of safety as defined in the bases for any technical specifications. Tech. Spec. 3/4.7.1.2 is not affected since the change does not affect the number of AFW pumps available or the required system flow.

Based upon the above, there is no unreviewed safety question.

Approved: 10/26/89

Unreviewed Safety Question Evaluation #89-235

Subject: Fuel Rod End Cap Design

Description: This change addresses use of a longer Fuel Rod Lower End Cap in the STPEGS fuel design

Safety Evaluation:

1) Does the subject of this evaluation increase the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report?

   This design change is conservatively bounded by the existing safety and design analyses. The change only affects fuel rod design. Equipment important to safety is not impacted or changed, nor is there any affect on the consequences of a malfunction of equipment important to safety as evaluated in the safety analysis report.

2) Does the subject of this evaluation create the possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report?

   The design change will slightly raise pin pressure and temperature histories. However, the analysis previously performed remains bounding. This change has no impact on equipment important to safety.

3) Does the subject of this evaluation reduce the margin of safety as defined in the basis for any technical specification?

   The fuel design parameters in question are not explicitly discussed in the Tech. Specs. The existing analyses and operational limits are still bounding and conservative.

Based upon the above, there is no unreviewed safety question.

Approved: 12/14/89

Unreviewed Safety Question Evaluation #89-236

Subject: Unit Vent and Condenser Air Removal Pump Discharge

Description: This change adds tie-in points to the unit vent and the condenser air removal pump discharge during the BMI outage.

Safety Evaluation:

1) Does the subject of this evaluation increase the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report?

   The tie-in point being added to the discharge line of the Condenser Air Removal System (CARS) pumps is downstream of radiation monitor RT-8027. Any effluent containing radiation would be detected by the monitor. The CARS pumps are not required for safe shutdown nor is the CARS pumps discharge line safety-related. Failure of the tie-in or the isolation valve will not increase the probability of an accident. Since the tie-in is located downstream of the radiation monitor, and the CARS pumps discharge to the atmosphere anyway, no additional radiation will be released if the tie-in point were to fail. The isolation valve being added will remain open until the 16" duct to the unit vent is installed on MDP 89-067 so as not to interfere with the discharge of the CARS pumps.

   The tie-in point to the unit vent is being added upstream of radiation monitor R-8010. The section of the unit vent to which the tie-in is being added is outside the MAB and is not safety-related. Failure of this section of the unit vent will not impact safe shutdown of the plant. Once the discharge from the MAB gets into this section of the unit vent there is no provision for stopping the flow to the atmosphere. The unit vent, radiation monitor RT-8010 and the tie-in point will all be fabricated to the same quality requirements (Class 7 and Seismic Category 1). Therefore, since these components are not safety-related and are not required to contain any radiation releases, the probability or consequences of an accident is not increased.

2) Does the subject of this evaluation create the possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report?

   Since none of the equipment in the subject of this review is safety-related, no accident involving the safe shutdown of the plant is possible. The unit vent, radiation monitor and tie-in point are all constructed to the same quality requirements.

Unreviewed Safety Question Evaluation #89-236 (Cont'd)

3) Does the subject of this evaluation reduce the margin of safety as defined in the basis for any technical specification?

The Technical Specification requires that radiation monitor RT-8010 function properly or be fixed within 30 days. While the monitor is being repaired, manual sampling of the MAB discharge can be performed. Since the tie-in to the unit vent is upstream of the radiation monitor, any manual sampling of effluent will be monitored also. This change will not reduce the margin of safety in the Technical Specifications. Addition of the tie-in point to the CARS pumps discharge line will not affect radiation monitor RT-8027 since the tie-in is located downstream of the radiation monitor and the discharge is to the atmosphere.

Based upon the above, there is no unreviewed safety question.

Approved: 11/13/89

Unreviewed Safety Question Evaluation #89-238

Subject: Control Room Annunciation

Description: The indication "Bank D Full Rod Withdrawal" on standard annunciation box 5M3-43 is to be moved to permissive status box 5M24-3D and renamed "C11 Bank D at 248 steps." Jumper wires are to be installed in the annunciator relay cabinets to accomplish this.

Safety Evaluation:

1) Does the subject of this evaluation increase the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report?

Alarm/indication status is not an event initiator, and the response to events is the same as previously considered in the FSAR. No capabilities or functions are being modified by this change. Therefore, there is no effect on the probability of occurrence of events important to safety by this change.

2) Does the subject of this evaluation create the possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report?

The intended function of this status indication has not been changed. Only the location has changed from an annunciator box to a permissive status box. Therefore, it does not create the possibility for an accident or malfunction of a different type.

3) Does the subject of this evaluation reduce the margin of safety as defined in the basis for any technical specification?

Relocation of this indication will have no effect on any item covered by the Tech. Spec. because the design intent and function have not changed. Therefore, the margin of safety as defied in the basic for any Tech. Spec. is not changed.

Based upon the above, there is no unreviewed safety question.

Approved: 11/1/89

Unreviewed Safety Question Evaluation #89-238

Subject: Control Room Annunciation

Description: The indication "Bank D Full Rod Withdrawal" on standard annunciation box 5M3-43 is to be moved to permissive status box 5M24-3D and renamed "C11 Bank D at 248 steps." Jumper wires are to be installed in the annunciator relay cabinets to accomplish this.

Safety Evaluation:

1) Does the subject of this evaluation increase the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report?

   Alarm/indication status is not an event initiator, and the response to events is the same as previously considered in the FSAR. No capabilities or functions are being modified by this change. Therefore, there is no effect on the probability of occurrence of events important to safety by this change.

2) Does the subject of this evaluation create the possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report?

   The intended function of this status indication has not been changed. Only the location has changed from an annunciator box to a permissive status box. Therefore, it does not create the possibility for an accident or malfunction of a different type.

3) Does the subject of this evaluation reduce the margin of safety as defined in the basis for any technical specification?

   Relocation of this indication will have no effect on any item covered by the Tech. Spec. because the design intent and function have not changed. Therefore, the margin of safety as defied in the basic for any Tech. Spec. is not changed.

Based upon the above, there is no unreviewed safety question.

Approved: 11/1/89

Unreviewed Safety Question Evaluation #89-239

Subject: Radiation Monitor Ranges

Description: To prevent having to make frequent changes to the FSAR due to slight radiation monitor range differences, a note is being added to state that exact ranges for radiation monitors are in the plant instrument scaling manuals, and that the range varies due to the conversion factor.

Safety Evaluation:

1) Does the subject of this evaluation increase the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report?

   Changing the conversion factor for each detector based on primary calibration results does not impact monitor operability or actuation setpoints, so the probability of occurrence of an accident previously evaluated in the SAR is not impacted. Varying the range by a small amount due to specific detector conversion factors being determined by the primary calibration program does not impact radiation monitor operability and actuation setpoints, so there is no increase in the consequences of an accident previously evaluated in the SAR.

   Changing the conversion factor is a software function. This ability was included as part of the original design intent. Neither the probability of occurrence or the consequences of a malfunction of equipment important to safety previously evaluated in the SAR is increased.

2) Does the subject of this evaluation create the possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report?

   Changing the detector conversion factor involves a software change to the monitor only. This is within the original design intent of the radiation monitors. Therefore, this change does not create the possibility for an accident or malfunction of equipment important to safety of a different type than any evaluated previously in the safety analysis report.

Unreviewed Safety Question Evaluation #89-239 (Cont'd)

3) Does the subject of this evaluation reduce the margin of safety as defined in the basis for any technical specification?

The detector conversion factor change in accordance with the primary calibration program does not impact the actuation setpoints or the operability of the radiation monitors so the margin of safety as defined in the basis for the technical specifications is not impacted.

Base upon the above, there is no unreviewed safety question.

Approved: 2/01/90

Unreviewed Safety Question Evaluation #89-240

Subject: Temporary Seal Water Header and Branch Lines

Description: Temporary seal water header and branch lines are to be installed to supply seal water to the Unit 1 and Unit 2 Circulating Water System and Open Loop Auxiliary Cooling System pumps.

Safety Evaluation:

1) Does the subject of this evaluation increase the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report?

   Failure of the affected systems does not prevent safe shutdown of the reactor. Failure of the temporary lines due to corrosion and/or deterioration is not expected to occur during their temporary service life. Flooding protection is available in the Circulating Water intake structure by large drains.

2) Does the subject of this evaluation create the possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report?

   The Circulating Water System is not required to perform any safety function. The Auxiliary Cooling Water System is a Non-Nuclear Safety Class System and is not safety-related. The change does not create the possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report.

3) Does the subject of this evaluation reduce the margin of safety as defined in the basis for any technical specification?

   Loss of the affected systems is not described in the basis of any Technical Specification. The subject system is not governed by Tech. Specs. Therefore, this change does not reduce the margin of safety as defined in the basis for any technical specification.

Based upon the above, there is no unreviewed safety question.

Approved: 11/13/89

Unreviewed Safety Question Evaluation #89-242

Subject: Redundant Indication for Turbine Impulse Chamber Pressure

Description: Permissive status indication for lampbox widow 5M5B-22 is being deleted. It is redundant to annunciator window 5M2-5E.

Safety Evaluation:

1) Does the subject of this evaluation increase the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report?

   Since the indication is redundant and there is not a requirement for redundant indication, and the dose analyses remain unchanged, the concern for increasing the probability of occurrence or the consequences of an accident or malfunction is not applicable.

2) Does the subject of this evaluation create the possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report?

   Since this is a redundant indication, during an alarm condition indication is provided by annunciator window 5M2-5E. Since the function continues to be provided, the deletion does not create the possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report.

3) Does the subject of this evaluation reduce the margin of safety as defined in the basis for any technical specification?

   The permissive status indication is not defined in the basis for any technical specification. Since the function is redundant, deleting it does not reduce the margin of safety.

Based upon the above, there is no unreviewed safety question.

Approved: 11/15/89

Unreviewed Safety Question Evaluation #89-243

Subject: Post-Accident Monitoring Instrumentation

Description: FSAR Table 7.5-1 Note dd is being revised to note that a scintillation-type analyzer is provided to perform I-131 equivalent analyses.

Safety Evaluation:

1) Does the subject of this evaluation increase the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report?

   The proposed change does not increase the probability of occurrence of an accident since the equipment is used for post-accident conditions. The proposed change does not increase the consequences of an accident since a single-channel analyzer is capable of analyzing I-131 during post-accident conditions. The proposed change does not cause malfunction of equipment important-to safety since the equipment is issued to analyze I-131 during post-accident conditions.

   The equipment specified in the proposed change meets the intent of Reg. Guide 1.97, Table 2, Part 20. The change allows use of either a multichannel or a single channel analyzer rather than a specific type of scintillator. I-131 can be analyzed and recorded on either a multichannel or a single channel scintillator-type analyzer. A multichannel analyzer allows pulses to be recorded simultaneously in all channels whereas the single channel analyzer allows measurements to be made a single energy band at a time. The effectiveness of a differential spectrum for I-131 is not reduced using a single channel analyzer instead of a multichannel analyzer or vice versa.

2) Does the subject of this evaluation create the possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report?

   Monitoring of I-131 during post-accident conditions is performed for mitigation. This change has no effect on the possibility of an accident or malfunction.

Unreviewed Safety Question Evaluation #89-243 (Cont'd)

3) Does the subject of this evaluation reduce the margin of safety as defined in the basis for any technical specification?

This type of equipment is not specifically addressed in the Technical Specifications. There is no reduction in the margin of safety as defined in the basis for any technical specification.

Based upon the above, there is no unreviewed safety question.

Approved: 11/15/89

Unreviewed Safety Question Evaluation #89-244

Subject: Closed Loop Auxiliary Cooling Water System

Description: To reflect the as-built condition of the plant, a vent and drain valve on the Auxiliary Cooling Water System instrument air emergency cooling water pump is being deleted from the P&ID.

Safety Evaluation:

1) Does the subject of this evaluation increase the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report?

The ACW instrument air emergency cooling water pumps are not safety-related and do not perform any safety-related function. Failure of the pump during LOOP will prevent the instrument air system from operation; however, all safety-related components serviced by the instrument air fail safe upon loss of instrument air. Deletion of the vent and drain valves on the ACW instrument air emergency cooling water pumps does not affect operation of the ACW system nor the systems serviced by the ACW system. Furthermore, since the ACW system and the systems served by it are not safety-related, failure of the pump would not jeopardize any safety-related function. Therefore, the subject of this evaluation does not increase the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report.

2) Does the subject of this evaluation create the possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report?

This change is consistent with the design basis of the subject systems and components. Thus, the subject of this change does not create any new failure modes not previously evaluated in the FSAR. Therefore, the subject of this evaluation does not create the possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report.

Unreviewed Safety Question Evaluation #89-244 (Cont'd)

3) Does the subject of this evaluation reduce the margin of safety as defined in the basis for any technical specification?

The ACW instrument air emergency cooling water pump is not described in the Technical Specification. Therefore the subject of this change does not reduce the margin of safety as defined in the basis for any Technical Specifications.

Based upon the above, there is no unreviewed safety question.

Approved: 11/27/89

Unreviewed Safety Question Evaluation #89-245

Subject: Circulating Water System

Description: A temporary pump is to be installed to drain the Unit 2 inlet header to the Unit 1 discharge header via outlet waterboxes. The permanent design for drain-down allows water to be transferred from one waterbox to another waterbox within the same unit. This temporary modification allows connection of waterboxes of the different units.

Safety Evaluation:

1) Does the subject of this evaluation increase the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report?

   The Circulating Water System performs no safety-related function, and failure of this system does not prevent safe shutdown of the reactor. Flooding caused by any ruptured hoses is bounded by previous analyses for flooding in the Turbine Generator Building. There are no passageways, pipe chases, or cableways from the TGB to areas containing safety-related equipment that are below the plant design flood level or that are not floodproof. If flooding occurs in the TGB, therefore, the flooding will have no effect on operability of safety-related equipment.

2) Does the subject of this evaluation create the possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report?

   The design intent is still met. The Circulating Water System and draindown system have no safety-related function, and this change does not create the possibility for an accident or malfunction of a different type than any evaluated previously.

3) Does the subject of this evaluation reduce the margin of safety as defined in the basis for any technical specification?

   The affected systems are not governed by the technical specifications. The Circulating Water System and the Turbine Generator Building area are nonsafety/nonseismic Category I components/structures and are not required for accident mitigation.

Based upon the above, there is no unreviewed safety question.

Approved: 11/17/89

Unreviewed Safety Question Evaluation #89-246

Subject: Feedwater Booster Pump Casing Vent

Description: This change shortens the east-west section of the casing vent piping, eliminating the flange and changing the vent valve from 1" to 3/4".

Safety Evaluation:

1) Does the subject of this evaluation increase the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report?

The Feedwater Booster Pumps are nonsafety-related and provide the necessary suction pressure of the Main Feedwater Pumps. (Three 50% capacity booster pumps connected in parallel provide for flexibility of operation). The main Feedwater Pumps are also nonsafety-related. The pumps are not required during shutdown operation of the plant.

Chapter 15 of the FSAR was reviewed for previously evaluated accident conditions. Loss of Normal Feedwater Flow is identified as an accident that is related to this subject evaluation. Pump failure is listed as one of the causes of the accident. The subject change will not increase the probability of the Feedwater Booster Pump failure because the pipe and weld joint stresses are within the Code requirements. Hence, the subject change will not increase the probability of Loss of Normal Feedwater Flow.

The worst postulated Loss of Normal Feedwater Flow event is one initiated by a loss of offsite power. Upon loss of offsite power, the Feedwater Booster Pumps are rendered out-of service and are not needed for safe shutdown. Hence, loss of booster pump(s) do not increase the consequence of the Loss of Normal Feedwater Flow.

The Booster and Main Feedpumps are not required to bring the plant to a safe shutdown condition. The subject change would not increase the probability of occurrence, or consequences of a malfunction of equipment important-to-safety.

Unreviewed Safety Question Evaluation #89-246 (Cont'd)

2) Does the subject of this evaluation create the possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report?

The subject of this evaluation does not create the possibility of an accident of a different type than previously evaluated in the SAR. At worst, Loss of Feedwater Booster Pump(s) would contribute to or result in a Loss of Normal Feedwater Flow, an event already evaluated in the SAR.

The subject of this evaluation does not create the possibility of a different type of malfunction of equipment important to safety since the booster pumps and the main feedpumps are not necessary for safe shutdown.

3) Does the subject of this evaluation reduce the margin of safety as defined in the basis for any technical specification?

Since the proposed change does not impact nor is bounded by the safety analysis, the subject change does not have an impact on the margin of safety.

Based upon the above, there is no unreviewed safety question.

Approved: 1/24/90

Unreviewed Safety Question Evaluation #89-247

Subject: Low Total Dissolved Solids Tanks

Description: This change will allow for transfer of the contents of the CP Area Sump to either of two Low Total Dissolved Solids (LTDS) tanks. Final Safety Analysis Report Section 9.3.3.1 currently describes this transfer to the Cation LTDS tank. The P&ID shows permanently installed piping specifically for transfer of the CP Area Sump to either LTDS tank.

Safety Evaluation:

1) Does the subject of this evaluation increase the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report?

   The Condensate Polishing Area Sump and LTDS Tanks are not safety-related, part of a safety-related system or connected to a safety-related system or component. The system is not modeled as part of the accident analysis; therefore, the subject of this evaluation does not increase the probability of occurrence or consequences of an accident or malfunction of equipment important to safety previous evaluated in the Safety Analysis Report.

2) Does the subject of this evaluation create the possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report?

   The Condensate Polishing Area Sump and LTDS Tanks have no effect on the types of postulated accidents since this system has no role in accident initiation or mitigation. Therefore, the subject of this evaluation does not create the possibility of an accident of a different type than any previously evaluated in the Safety Analysis Report.

   See (1). Therefore, the subject of this evaluation does not create the possibility of a different type of malfunction of equipment important-to-safety than any previously evaluated in the Safety Analysis Report.

Unreviewed Safety Question Evaluation #89-247 (Cont'd)

3) Does the subject of this evaluation reduce the margin of safety as defined in the basis for any technical specification?

The Condensate Polishing Area Sump and LTDS Tanks are not considered in the Technical Specifications. Therefore, the subject of this evaluation will have no effect on the margin of safety as defined in the basis for any Technical Specification.

Based upon the above, there is no unreviewed safety question.

Approved: 12/09/89

Unreviewed Safety Question Evaluation #89-248

Subject: Potable Water and Sewage Treatment at STPEGS Firing Range

Description: This modification will provide potable water and sewage treatment to the STPEGS firing range.

Safety Evaluation:

1) Does the subject of this evaluation increase the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report?

   The STP Firing Range has its own sanitary and hypochlorination system designed to meet the Texas Department of Health Rules and Regulations.

   The hypochlorination unit for this facility uses liquid sodium hypochlorite, thereby eliminating the potential gaseous chlorine hazards so that the existing toxic gas analysis remains unaffected.

   Therefore, the design and the installation of this modification does not increase the probability of occurrence or consequences of an accident or an accident of a different type, nor does it increase the probability of occurrence or consequences of a malfunction of equipment or a different type of a malfunction of equipment important to safety as previously evaluated in the SAR. Therefore, there is no impact to plant safe operations or the environment.

2) Does the subject of this evaluation create the possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report?

   See (1). Therefore the change does not create the possibility for a accident or malfunction of equipment important to safety of a different type than any evaluated previously in the safety analysis report.

3) Does the subject of this evaluation reduce the margin of safety as defined in the basis for any technical specification?

   The well water system is not governed by any Technical Specification. In addition, since this change is non-radiological in nature, there is no impact to the radiological effluent and radiological environmental monitoring Technical Specifications. Therefore, there is no reduction in the margin of safety.

Based upon the above, there is no unreviewed safety question.

Approved: 12/06/89

Unreviewed Safety Question Evaluation #89-249

Subject: Safety Injection (SI) System

Description: P&ID's show valve SI-0126C as being normally closed. The valve is actually locked closed. The valve is locked closed in accordance with approved operating procedures.

Safety Evaluation:

1) Does the subject of this evaluation increase the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report?

   The valves are not included in the Failure Modes and Effects Analysis (FMEA) for the SI System. The proposed change will not affect the failure mode of the valves. The valves are already normally closed and will remain so following the change. The extra requirement to lock these valves in the closed position will provide further assurance that the flow path to the Primary Process Sampling System is isolated when not in use. The proposed change will not increase the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report.

2) Does the subject of this evaluation create the possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report?

   See (1). The proposed change will not create the possibility for an accident or a malfunction of a different type than any evaluated previously in the safety analysis report.

3) Does the subject of this evaluation reduce the margin of safety as defined in the basis for any technical specification?

   The Technical Specifications ensure that emergency core cooling capability is available to respond to a Design Basis Accident (DBA). The proposed change does not impact the bases for these Tech. Specs. because the locking requirement for valve SI-0126C in both units is already established in plant procedures and on the Locked Valve List.

   As the proposed change does not affect the FMEAs for the SI System, the bases for the TSs in Section 3/4.5 are not affected. Therefore, the proposed change does not reduce the margin of safety as defined in those bases.

Based upon the above, there is no unreviewed safety question.

Approved: 12/14/89

Unreviewed Safety Question Evaluation #89-250

Subject: Suction Piping from the RWST to the Centrifugal Charging Pumps (Unit 2)

Description: This change corrects the subject system P&ID to show the as-built configuration, deleting vent valve SI-0161 and drain valve SI-0245. This change applies only to Unit 2.

Safety Evaluation:

1) Does the subject of this evaluation increase the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report?

   New pipe routing removed a high point that would induce an air bubble when the RWST is drained to one of the levels approved in the Technical Specifications (e.g., 122,000 gallons in Mode 5). Therefore, the vent valve (SI-0161) currently shown on the P&ID is not required.

   The drain valve in the suction line was previously deleted, but was inadvertently not deleted from the P&ID.

   The changes do not introduce an accident or malfunction of equipment important to safety that has not been analyzed in the SAR. The changes also do not affect the SAR analyses of accidents or malfunctions of equipment important to safety.

2) Does the subject of this evaluation create the possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report?

   See (1). This change does not create the possibility for an accident or malfunction of equipment important to safety of a different type than any evaluated previously in the safety analysis report.

3) Does the subject of this evaluation reduce the margin of safety as defined in the basis for any technical specification?

   The changes do not reduce the margin of safety that forms the basis for Technical Specification 3/4.5.5. The RWST volume and boron concentration are not changed by deletion of the vent and the drain valve from the CCP suction line. A potential source of leakage from the RWST was eliminated when drain valve SI-0245 was removed.

Unreviewed Safety Question Evaluation #89-250 (Cont'd)

This change requires an evaluation of its effect upon the availability of the CCPs to provide a source of borated water from the RWST. This flow path is required in several accident scenarios if the normal flow path from the Boric Acid Storage Tank is not available. Deletion of the vent and drain valves from the suction line will not increase the chance of cavitation and CCP failure due to air binding. Therefore, the margin of safety which constitutes the bases for Technical Specifications 3/4.1.2.1 through 3/4.1.2.6 is not reduced. The alternate boration source from the RWST will still be available.

Based upon the above, there is no unreviewed safety question.

Approved: 12/14/89

Unreviewed Safety Question Evaluation #89-251

Subject: Fire Protection System

Description: This change to the subject system P&ID documents the as-built condition of the Fire Protection System. PSL-5187 and PI-5187A and associated alarms in the Fire Protection System are addressed. Fire Protection supply header pressure sensor is relocated along a common header to facilitate construction.

Safety Evaluation:

1) Does the subject of this evaluation increase the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report?

   The identified components have been relocated along the same supply header. Their function/operation is not altered by this as-built design change. The identified instruments continue to monitor the carbon filter units' fire protection system supply header pressure and may not be isolated from the header pipe. Their signal is not altered by this change, and thus all analyses are unchanged.

2) Does the subject of this evaluation create the possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report?

   There is no impact on system operation/function. All materials and construction practices used were in accordance with standard procedures. The instrumentation continues to monitor the system supply header pressure with no new means of isolation introduced. The signal and transmission have not been altered. Appendix R analyses are not affected. Installation is Seismic Category II/I. Flooding analysis is not affected.

3) Does the subject of this evaluation reduce the margin of safety as defined in the basis for any technical specification?

   This system is not governed by the Technical Specifications. The change does not reduce the margin of safety as defined in the basis for any technical specification.

Based upon the above, there is no unreviewed safety question.

Approved: 12/14/89

Unreviewed Safety Question Evaluation #89-252

Subject: Fuel Oil Storage and Transfer System

Description: This change adds a low point drain valve to the Fuel Oil Storage and Transfer System P&ID. This change reflects as-built conditions.

Safety Evaluation:

1) Does the subject of this evaluation increase the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report?

   Addition of the low point drain valve to the P&ID does not change the system design or operation since this normally closed valve is only used to drain the line. Addition does not change, degrade or prevent actions, or alter any assumptions or conclusions previously made. There is no impact directly or indirectly on equipment important to safety as defined in the SAR. Operability or functionability of the subject system is not affected by adding the drain valve. Therefore, there is no increase in the probability of occurrence or consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report.

2) Does the subject of this evaluation create the possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report?

   Adding the normally closed low point drain valve to the P&IDs does not change the operability or functionability of the system. The change does not create the possibility for an accident or malfunction of equipment important to safety of a different type than any evaluated previously in the safety analysis report.

3) Does the subject of this evaluation reduce the margin of safety as defined in the basis for any technical specification?

   The operational and functional requirements of the affected system are not affected by addition of the low point drain valve to the P&IDs. The proposed change does not reduce the margin of safety as defined in the bases for any technical specification.

Based upon the above, there is no unreviewed safety question.

Approved: 12/14/89

Unreviewed Safety Question Evaluation #89-253

Subject: Chemical and Volume Control System

Description: This change deletes from the Unit 2 CVCS duplicate valve CV-0943 and 6" x 4" reducer from line 4" CV-2047-PD7 as shown on the P&ID. The P&ID does not reflect the "as-built" condition.

Safety Evaluation:

1) Does the subject of this evaluation increase the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report?

   Deletion of one of the duplicate high point vent valves CV-0443 and 6" x 4" reducers on line 4"CV-2047-PD7 on the Unit 2 P&ID does not change the CVCS design or operation. This is a normally closed valve used during system startup only. Therefore, this change does not increase the probability of occurrence of an accident previously evaluated in the SAR.

   Deletion will not change, degrade, or prevent actions, alter any assumptions or conclusions previously made, or result in an increase in accident doses for accidents previously evaluated in the SAR.

   Deletion does not impact equipment important to safety as defined in the SAR nor does it cause an increase in the probability of an accident or malfunction of equipment important to safety previously evaluated in the SAR.

   This change does not affect the operability or functionability of the CVCS as it only deletes the duplicate high point vent valve and reducers on the Unit 2 P&ID to correct the error. No physical changes to equipment, piping, or layout are proposed. Therefore, this change will not result in increased consequences or changes in results of a malfunction of equipment important to safety previously evaluated in the SAR.

2) Does the subject of this evaluation create the possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report?

   This change corrects the P&ID by deleting one of the duplicated high point vent valves and reducers. The change does not change the operability or functionability of the system. Therefore, it will not create the possibility for an accident or malfunction of equipment important to safety than any previously evaluated in the SAR.

Unreviewed Safety Question Evaluation #89-253 (Cont'd)

3) Does the subject of this evaluation reduce the margin of safety as defined in the basis for any technical specification?

The plant Technical Specifications were reviewed and the operational and functional requirements of the CVCS are not affected by this change. Therefore, the proposed change does not reduce the margin of safety as defined in the bases for any Technical Specification.

Based upon the above, there is no unreviewed safety question.

Approved: 12/14/89

Unreviewed Safety Question Evaluation #89-254

Subject: Nitrogen Storage System

Description: A permanent high pressure Nitrogen Storage System is to be installed in place of a temporary system.

Safety Evaluation:

1) Does the subject of this evaluation increase the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report?

The high pressure nitrogen supply system performs no safety function and is classified as non-nuclear safety-related. Failure of this system does not compromise safety-related systems or prevent safe shutdown of the reactor. The addition is located outside the protected area approximately 500 feet from the closest Category I structure (the Unit 2 Diesel Bldg.). This addition will not increase the probability of an accident since the nitrogen system is not required for safe shutdown of the plant and because the modification is to install the high pressure nitrogen system as was originally designed and analyzed in the FSAR.

Failure of the system will not increase the consequences of an accident since it is not located in a protected area.

Although the high pressure nitrogen system is responsible for pressurizing the SI Accumulators for injection into the reactor coolant system, failure of the nitrogen system will not affect the accumulators due to the double isolation of the systems from each other. Also, the Technical Specifications require the accumulators to be charged in order to operate the reactor so that, if the accumulators need charging and the nitrogen system is not available, the reactor must be brought to hot standby within 6 hours.

This modification does not affect any safety-related equipment and it is not located near any safety-related equipment. Since the equipment being added by this modification is outside the protected area and not safety-related or affecting any safety-related equipment, the possibility of a malfunction to safety-related equipment and subsequent consequences are not increased.

Unreviewed Safety Question Evaluation #89-254 (Cont'd)

2) Does the subject of this evaluation create the possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report?

The system is non-nuclear safety-related and will not affect any safety-related equipment or the ability of the plant to achieve safe shutdown. The possibility of any type of malfunction that would affect safety-related equipment is not increased.

The high pressure nitrogen supply system is directly tied to the safety injection accumulators only. It does not interface with any other system. As discussed in (1), failure of the system will not increase the possibility of malfunction of safety-related equipment.

3) Does the subject of this evaluation reduce the margin of safety as defined in the basis for any technical specification?

Adding the permanent high pressure nitrogen storage system to the facility will not decrease the margin of safety in the Technical Specifications since the high pressure nitrogen storage system is not specifically addressed in the Technical Specifications. Also, the provisions for bringing the plant to a safe condition are already in the Tech. Spec. specifically addressing the situation of one or more of the accumulators requiring charging.

Based upon the above, there is no unreviewed safety question.

Approved: 12/14/89

Unreviewed Safety Question Evaluation #89-255

Subject: Equipment Qualification

Description: This change to the FSAR incorporates Westinghouse information to define the general methodology used in equipment qualification and remove a redundant statement.

Safety Evaluation:

1) Does the subject of this evaluation increase the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report?

   None of the changes alter the existing equipment qualification documentation nor affect qualification of the installed safety-related equipment at the plant.

   These changes do not:

   1. Increase any design basis accident analyzed to demonstrate that the plant can be operated without undue risk;

   2. Impact the design basis transients;

   3. Alter the radiological consequences of any accident described in the safety analysis report (SAR);

   4. Change equipment, component(s), nor material(s) qualification as accepted by the NRC for use in safety-related systems and;

   5. Alter any other existing qualification documentation already accepted, approved and in use at STP.

2) Does the subject of this evaluation create the possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report?

   None of the changes alter the existing equipment qualification documentation nor affect qualification of the installed safety-related equipment at the plant.

Unreviewed Safety Question Evaluation #89-255 (Cont'd)

3) Does the subject of this evaluation reduce the margin of safety as defined in the basis for any technical specification?

None of the changes alter the existing equipment qualification documentation nor affect qualification of the installed safety-related equipment at the plant.

Based upon the above, there is no unreviewed safety question.

Approved: 12/14/89

Unreviewed Safety Question Evaluation #89-256

Subject: Hydrogen Storage Facility

Description: A permanent hydrogen storage facility is to be installed to replace a temporary one.

Safety Evaluation:

1) Does the subject of this evaluation increase the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report?

   The UFSAR describes the design basis explosion from an offsite or onsite facility. The resulting overpressure shock waves from that event are greater than those presented by an explosion at the proposed Hydrogen Storage Facility. Therefore, the facility will not increase the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report.

2) Does the subject of this evaluation create the possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report?

   Analyses show that an explosion at the Hydrogen Storage Facility is not the bounding design basis event. Therefore, the proposed change does not create the possibility for an accident or malfunction of equipment important to safety of a different type than any evaluated previously in the safety analysis report.

3) Does the subject of this evaluation reduce the margin of safety as defined in the basis for any technical specification?

   Analyses of an explosion at the Hydrogen Storage Facility have shown that the resulting overpressure at the Unit 2 Diesel Generator Building (nearest safety-related structure) would be less than that allowed by RG 1.91. The proposed change does not reduce the margin of safety as defined in the basis for any Technical Specification.

Based upon the above, there is no unreviewed safety question.

Approved: 4/01/90

Unreviewed Safety Question Evaluation #89-257

Subject: MSR High Level Alarm

Description: This change defeats the MSR High Level Alarm by disconnecting it from annunciator window 2D.

The function of the MSR High Level Alarm is to assist in monitoring the performance of the Heater Drip System. Presently this alarm is not operating properly and is causing the main control board annunciator to alarm continuously, becoming a nuisance. Temporary removal until a permanent repair can be made will improve the operators ability to monitor the plant.

Safety Evaluation:

1) Does the subject of this evaluation increase the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report?

Monitoring of the Heater Drip performance is also done by use of the MSDT High Level Alarms, MSDT High Level Dump, MSDT Pump Running Indication, Local Sight Glass Level Indication and Total MSDT Flow to the DA. All of these indications assist in monitoring for possible induction of water into the LP Turbines. Therefore, removal of the MSR High Level Alarm will not increase the probability of occurrence or consequences of an accident described in the FSAR.

Removal of the MSR High Level Alarms does not change the process control configuration of the plant and is not safety-related. Therefore, removal of these alarms will not increase the probability of failure of any safety-related equipment since the monitoring capability of safety-related components and the physical arrangement of the plant has not been altered.

The subject of this evaluation is not safety-related and can not increase the consequences of a malfunction of any safety-related equipment since the alarm is not used to monitor safety-related components.

2) Does the subject of this evaluation create the possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report?

The MSR High Level Alarm is nonsafety-related and used for indication only and does not change the process control configuration of the plant. This alarm is not referenced in any FSAR accident analyses. Therefore, deletion of this alarm does not create any accident that was not present prior to the change.

Unreviewed Safety Question Evaluation #89-257 (Cont'd)

Since this change does not affect the process control configuration and is not safety-related, it can not cause any different malfunctions of safety-related equipment than those that existed prior to the change.

3) Does the subject of this evaluation reduce the margin of safety as defined in the basis for any technical specification?

The MSR High Level Alarm is not discussed in the bases of any Technical Specification. Therefore, deletion of this alarm does not reduce the margin of safety for any Technical Specification.

Based upon the above, there is no unreviewed safety question.

Approved: 2/01/90

Unreviewed Safety Question Evaluation #89-258

Subject: Cold Overpressure Mitigation System (COMS) "Armed" Signal Interlock

Description: The subject interlock is being deleted from the Pressurizer Pressure PORV Block Valves and the "Armed" signal interlocked with the Reactor Coolant System low temperature indication. This is to remove a nuisance alarm.

Safety Evaluation:

1) Does the subject of this evaluation increase the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report?

The proposed modification does not increase the possibility of occurrence of an accident previously evaluated in the SAR. Removal of the interlock signal of the Cold Overpressure Mitigation System (COMS) "ARMED" with that of the Pressurizer Pressure PORV Block Valves will allow operators to ensure that the PORV block valves are full open at any given moment, and that maximum overpressure protection can be achieved during actuation of the RC Pressurizer Pressure PORVs. Therefore, this change only enhances alarm indication for the RC Pressurizer Pressure PORV Block Valves and RCS Temperature Lo, so that the probability of occurrence of an accident is not affected.

There will not be any increased consequences of an accident as a result of this modification. The proposed modification will better define the system's operational status for the Pressurizer Pressure PORV Block Valves and delete a nuisance alarm in the Main Control Room.

The function and/or the operation of the safety-related components/equipment are not affected; only the indication of the components operation is affected.

This modification will augment the operators' awareness of the systems operational status with regards to the RC Pressurizer Pressure PORV Block Valve and delete CR main annunciator nuisance alarms. There is no increase of consequences of a malfunction of equipment important to safety.

Unreviewed Safety Question Evaluation #89-258 (Cont'd)

2) Does the subject of this evaluation create the possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report?

There is no new accident condition created by this modification. This change only provides an operational status for the RC Pressurizer Pressure PORV Block Valves of being "NOT FULL OPEN" at any given time. This will allow maximum overpressure protection to be achieved during actuation of the Pressurizer Pressure PORVs by indicating that the Pressurizer Pressure PORV Block Valves are not inhibiting the Pressurizer Pressure PORVs during normal operation and delete a nuisance alarm by interlocking COMS "ARMED" with RCS Temp. Lo. Therefore, an accident of a different type is not created by this change.

A different type of malfunction condition of equipment is not created. This modification has been designed and will be performed using acceptable standards to ensure efficient operation of equipment important to safety. The function and/or the operation of the components/equipment important to safety are not being changed; only the indication of the components operation is affected.

3) Does the subject of this evaluation reduce the margin of safety as defined in the basis for any technical specification?

The margin for safety as defined in the Technical Specifications is not reduced and not affected by this change. The Tech. Specs. do not mention or rely on the interlocking signal of COMS with RC PRZR PRESS PORV Block valves or RC TEMP LO indication. The proposed modification better defines the system's operational status with respect to the RC Pressurizer Pressure PORVs Block Valves and deletes a nuisance alarm for RCS TEMP LO.

Based upon the above, there is no unreviewed safety question.

Approved: 3/12/90

Unreviewed Safety Question Evaluation #89-259

Subject: Reactor Coolant System - Valve Leak Repair

Description: A freeze seal will be used upstream of valve RC0057C during replacement of a valve disc on downstream valve RC0058C.

Safety Evaluation:

1) Does the subject of this evaluation increase the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report?

Installation of a freeze seal for maintenance while the unit is in Mode 5 does not increase the possibility of an accident evaluated in the FSAR. The location of the seal will isolate the Loop 3 drain line and CVCS letdown. Loop 3 drain is normally isolated and letdown is being performed with RHR while the RCS is at atmospheric pressure.

Installation of the freeze seal does not increase the consequences of an event. Loss of reactor coolant through valve RC0058C (which will be disassembled for maintenance) would require failure of the freeze seal and failure of valve RC0057C. Contingencies have been developed for this maintenance procedure to stop leakage before a drop in RCS level can cause any damage.

Application of the freeze seal while the RCS is in a static condition with 30 psi head pressure poses no probability for causing equipment malfunction or failure. The force of 30 psi moving the freeze seal will not cause damage to the valve in the system.

Application of a freeze seal does not change the function of these systems in Mode 5. CVCS letdown is not required and isolation of the RCS loop 3 drain is the normal system configuration. If equipment fails in Mode 5 there will be no impact on safety due to the presence of the freeze seal.

2) Does the subject of this evaluation create the possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report?

The freeze seal acts as a barrier to RCS leakage and serves the same function as a block valve. The effect of the seal does not change the operation of the unit at Mode 5. The possibility of an accident is not increased by this configuration.

The presence of a freeze seal does not change the operation of the unit in Mode 5. With the RCS in a static condition, the freeze seal does not increase the possibility of equipment malfunction.

Unreviewed Safety Question Evaluation #89-259 (Cont'd)

3) Does the subject of this evaluation reduce the margin of safety as defined in the basis for any technical specification?

There is no Technical Specification that discusses application of a freeze seal. The freeze seal serves the design intent of a isolation valve for Loop 3 drain and CVCS letdown is not required in Mode 5. No bases of the Tech. Specs. are affected and there is no effect on the margin of safety of any Technical Specification.

Based upon the above, there is no unreviewed safety question.

Approved: 12/22/89

Unreviewed Safety Question Evaluation #89-260

Subject: Fuel Handling Building HVAC Supply Header Temperature Switches

Description: This change adds two temperature switches (high and low) to the common FHB HVAC Supply Header, revises high/low setpoints, and spares six existing switches from the three trains.

Safety Evaluation:

1) Does the subject of this evaluation increase the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report?

This change affects the nonsafety-related Supply Air portion of the FHB HVAC system only, and has no affect on the safety-related Supplementary Cooler System (area temp. monitoring spec. is not changed) or the Exhaust Air Subsystem. This change will not affect operation of the safety-related portion of the FHB HVAC system during a Fuel Handling Accident.

This change does not affect the Design Basis Fuel Handling accident because the temperature at which the supply air is provided is not affected.

Monitoring temperatures of individual trains results in an alarm due to the idle train and does not convey the desired information concerning the temperature of the supply air provided. Addition of these temperature switches does not affect system operation or function.

This change only affects a non-safety alarm used to indicate an off-temperature condition. The new location of the temperature switches will only prevent nuisance alarms and provide meaningful information to the Operators.

2) Does the subject of this evaluation create the possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report?

As alarms in a non-safety system, these temperature switches cannot create the possibility of an accident previously evaluated in the SAR. These temperature switches will have no effect on system function or operability.

This change does not impact the requirement that a "High and Low temperature alarm of Supply Air" be displayed to the Operator in the Control Room as stated in the FSAR.

Unreviewed Safety Question Evaluation #89-260 (Cont'd)

3) Does the subject of this evaluation reduce the margin of safety as defined in the basis for any technical specification?

This change only affects the temperature monitoring of the nonsafety-related Supply Air Subsystem and does not change the temperature control in any manner. Area temperature monitoring is unaffected and this change will have no affect on the Design Basis Fuel Handling accident.

Based upon the above, there is no unreviewed safety question.

Approved: 12/20/89

Unreviewed Safety Question Evaluation #89-261

Subject: Inservice Inspection (ISI) Program

Description: These changes delete a commitment to submit ISI outage plans to the NRC, and specify PSI/ISI Code edition/addenda and schedules for PSI/ISI plan and report submittals.

Safety Evaluation:

1) Does the subject of this evaluation increase the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report?

   These changes make the reply to Question 121.5 consistent with our PSI/ISI program commitments and submittals and consistent with the history of our plan and report submittals. The ISI outage plans will continue to be prepared for each applicable ISI refueling outage and available for NRC onsite inspection. Therefore, this change does not diminish the quality of the ISI program and none of the quality attributes associated with the ISI outage plans are changed.

   The changes do not increase the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report.

2) Does the subject of this evaluation create the possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report?

   See (1). These changes do not create the possibility for an accident or malfunction of equipment important to safety of a different type than any evaluated previously in the safety analysis report.

3) Does the subject of this evaluation reduce the margin of safety as defined in the basis for any technical specification?

   See (1). These changes do not reduce the margin of safety as defined in the basis for any technical specification.

Based upon the above, there is no unreviewed safety question.

Approved: 12/14/89

Unreviewed Safety Question Evaluation #89-262

Subject: Circulating Water (CW) Pump

Description: This change installs a blind flange at the location of CW Pump #11 discharge valve. This is a temporary modification to allow CW operation with isolation of CW pump #11 for repair.

Safety Evaluation:

1) Does the subject of this evaluation increase the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report?

   The CW system performs no safety function; failure of the system or flange does not prevent safe shutdown of the reactor. The change does not increase the probability of occurrence or consequences of an accident previously evaluated in the safety analysis report. The blind flange will serve the purpose of isolation of the CW pump and meets all design requirements for this application. The change does not increase the probability of occurrence or the consequences of a malfunction of equipment important to safety previously evaluated in the safety analysis report.

2) Does the subject of this evaluation create the possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report?

   The CW system is not required to perform any safety function. This change does not create the possibility for an accident or malfunction of equipment important to safety of a different type than any evaluated previously in the safety analysis report.

3) Does the subject of this evaluation reduce the margin of safety as defined in the basis for any technical specification?

   Loss of the CW system or failure of the blind flange is not described in the basis of any technical specification. This change does not reduce the margin of safety as defined in the basis for any technical specification.

Based upon the above, there is no unreviewed safety question.

Approved: 12/19/89

Unreviewed Safety Question Evaluation #89-263

Subject: Extraction Steam Flanges

Description: This temporary modification blocks extraction steam lines from the fourth stage of LP Turbine 13N as a temporary repair to prevent steam flow out of a ruptured bellows in the extraction line.

Safety Evaluation:

1) Does the subject of this evaluation increase the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report?

   This temporary repair does not increase the probability of occurrence of an accident previously evaluated in the Safety Analysis Report because the repair is within the allowable guidelines from the turbine vendor for isolating extraction steam from the turbine, and therefore does not affect operability of the turbine.

   This temporary repair does not increase the consequences of an accident or malfunction of equipment important to safety previously evaluated in the Safety Analysis Report because turbine operability is not affected by the repair.

   This temporary repair does not increase the probability of a malfunction of equipment important to safety previously evaluated in the Safety Analysis Report because turbine operability is not affected and because the location of the repair is inside the main condenser remote from any systems, components, or structures which are important to safety.

2) Does the subject of this evaluation create the possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report?

   This temporary repair does not create the possibility of an accident of a different type than any previously evaluated in the Safety Analysis Report because operability of the turbine has not been affected and the turbine systems are nonsafety-related, and thus are not part of any accident analysis, with exception of turbine overspeed and trip, which are unaffected. This temporary repair does not create the possibility of a different type of malfunction of equipment important to safety than any previously evaluated in the Safety Analysis Report because the repair is remote from any systems, components, or structures which are important to safety.

Unreviewed Safety Question Evaluation #89-263 (Cont'd)

3) Does the subject of this evaluation reduce the margin of safety as defined in the basis for any technical specification?

This temporary repair does not reduce the margin of safety as defined in the basis for any Technical Specifications because the capability to prevent design overspeed of the turbine has not been affected. Those portions of the turbine controls required for overspeed protection are the only parts of the turbine included in Technical Specifications (3/4.3.4) and are the only portions of the turbine that could affect any basis in the Technical Specifications. Nothing related to the turbine trip on reactor trip, or reactor trip on turbine trip controls is affected by this change.

Based upon the above, there is no unreviewed safety question.

Approved: 12/19/89

Unreviewed Safety Question Evaluation #89-264

Subject: Zinc, Aluminum, and Zinc-Based Paint Quantities for the Post-LOCA Hydrogen Generation Analysis

Description: This change addresses the current result of design calculations for generation of hydrogen in the post-LOCA containment environment.

Safety Evaluation:

1) Does the subject of this evaluation increase the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report?

   The quantity of Hydrogen generated following a LOCA does change, but the basis for the analysis does not. Therefore, an explosive concentration of Hydrogen will still not develop.

   The proposed change does not affect the analysis of the availability of the containment emergency sumps to allow recirculation flow. Therefore, the proposed change will not impact upon the recirculation of emergency cooling water from the sumps, and equipment that relies upon that flow will not be affected.

   Therefore, the proposed change does not increase the probability or the consequences of an accident or a malfunction of equipment important to safety that has been previously analyzed in the Safety Analysis Report.

2) Does the subject of this evaluation create the possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report?

   The additional quantities of Hydrogen-producing corrodible materials will not increase the likelihood of a Hydrogen explosion. Therefore, the proposed change does not create the possibility of an accident or of a malfunction of equipment important to safety that has not been previously analyzed in the Safety Analysis Report.

Unreviewed Safety Question Evaluation #89-264 (Cont'd)

3) Does the subject of this evaluation reduce the margin of safety as defined in the basis for any technical specification?

STPEGS operating procedures that would be in effect when the recombiners would be needed will ensure more than enough time to bring the recombiners up to service. Therefore, the margins of safety as defined in the bases of the applicable TS are not affected by the proposed UFSAR change.

Based upon the above, there is no unreviewed safety question.

Approved: 1/30/90

Unreviewed Safety Question Evaluation #89-265

Subject: Unit 2 Mechanical Auxiliary Building Main Supply Air Heaters

Description: This change is to reduce the Unit 2 MAB HVAC main supply airflow to meet the negative building pressure requirements. The change also installed blank-off plates at the MAB main supply air heaters in order to eliminate the dead air spots detected at the heater during air velocity testing.

Safety Evaluation:

1) Does the subject of this evaluation increase the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report?

The change does not increase the probability of occurrence or the consequences of an accident previously evaluated in the Safety Analysis Report because the MAB Main Supply Heaters are still performing the same function with respect to equipment/systems important to safety. The proposed change has not impacted or changed the environmental conditions of operation for the safety-related equipment/systems and also has not affected or impacted the safety-related MAB Supplementary Cooler system.

The change does not increase the probability of occurrence or the consequences of a malfunction of equipment important to safety previously evaluated in the Safety Analysis Report. The MAB Main Supply Heaters are not equipment important to safety, but they are required to ensure that the MAB air temperature exceeds 50°F. The heater type, layout, and operating parameters remain unchanged; only the heat output has been changed. The equipment/systems important to safety are still operating with the same minimum bulk air temperature requirements. The proposed change has not impacted or changed the environmental conditions of operation for any safety-related equipment/systems.

Unreviewed Safety Question Evaluation #89-265 (Cont'd)

2) Does the subject of this evaluation create the possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report?

The change does not create the possibility of an accident of a different type than any previously evaluated in the Safety Analysis Report because the design change has not affected the safety-related portion of the MAB HVAC system. The design change has also not changed the interface of the MAB Main Supply Heaters with the MAB safety-related equipment/systems since the same minimum bulk air temperature requirements are being maintained. Therefore, MAB equipment/systems important to safety are still operating with the same environmental conditions as before the design change.

The change also does not create the possibility of a different type of malfunction of equipment important to safety than any previously evaluated in the Safety Analysis Report.

3) Does the subject of this evaluation reduce the margin of safety as defined in the basis for any technical specification?

The Technical Specifications do not discuss operation of the MAB main air supply heaters. The MAB HVAC system is important for maintaining area temperature in specific areas, and the Supplementary Coolers are required to maintain those Technical Specifications. However, the proposed change does not affect operation of the Supplementary Coolers. Therefore, the subject of this evaluation does not reduce the margin of safety as defined in the basis for any Technical Specifications.

Based upon the above, there is no unreviewed safety question.

Approved: 1/30/90

Unreviewed Safety Question Evaluation #89-266

Subject: Condenser 13 Broken Thermocouple and Conduit Repair

Description: A broken thermocouple and conduit are to be addressed by removing loose conduit and thermocouple wire, and plugging or capping the connection. This is a temporary deletion.

Safety Evaluation:

1) Does the subject of this evaluation increase the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report?

   These instruments do not affect the probability of occurrence of any accident previously evaluated in the safety analysis report. The extraction steam temperature readings are not used to mitigate the consequences of an accident evaluated in the SAR, assess the condition of any equipment important to safety previously evaluated in the SAR, or to compensate for malfunction of any equipment important-to-safety previously evaluated in the SAR.

2) Does the subject of this evaluation create the possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report?

   The subject equipment is only used to assist in troubleshooting possible performance problems in the steam cycle. The equipment's absence will not create the possibility for an accident or malfunction of equipment important to safety of a different type than any evaluated previously in the safety analysis report.

3) Does the subject of this evaluation reduce the margin of safety as defined in the basis for any technical specification?

   Extraction steam temperature measurement is not required to meet any Limiting Condition for Operation, surveillance requirement, or basis for any Tech. Spec. Absence of the subject extraction steam temperature measurement has no effect on the margin of safety of any Tech. Spec.

Based upon the above, there is no unreviewed safety question.

Approved: 12/20/89

Unreviewed Safety Question Evaluation #89-267

Subject: ESF Reset Switches

Description: This change relocates the Unit 1 ESF reset switches for Feedwater, Steam Generator Blowdown, and Sampling valves from the Switchgear Rooms to the Main Control Room. The switches for Unit 2 have already been relocated.

Safety Evaluation:

1) Does the subject of this evaluation increase the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report?

Relocation of the subject switches does not change the FW and SB systems or the ESF actuation systems design or operation. All functions previously available to the operator remain the same. Therefore, the relocation of components does not increase the probability of occurrence of an accident and all previously evaluated functions in the SAR remain unchanged. No changes to the function of the systems are being performed other than physical relocation of the reset switches. Also, addition of combustible loads (cables) has been analyzed and approved.

Relocating the reset switches will not change, degrade, or prevent actions; alter any assumptions or conclusions previously made; or result in an increase in accident doses for any accidents as previously evaluated in the SAR. Relocation of switches to the control room has no affect on any of the system functions; relocation of components does not affect the consequences of an accident because the existing dose analysis remains unaffected and bounding as a result of this change.

This change does not impact either directly or indirectly any important to safety (ITS) equipment as defined in the SAR nor does it cause an increase in the probability of an accident or malfunction of ITS equipment previously evaluated in the SAR. All equipment added by this modification is of the same form, fit, and function as previously used in the Auxiliary relay cabinets. The equipment has been reviewed for conformance with the seismic and environmental requirements of the new location and is found to meet all requirements stated in the SAR. The possibilities of a malfunction of equipment ITS are not affected or modified by this change.

Unreviewed Safety Question Evaluation #89-267 (Cont'd)

In addition, this change will not result in any increased consequences or changes in results, assuming malfunction of ITS equipment as defined in the design basis for the equipment Important To Safety previously evaluated in the SAR because the equipment and components being used are the same as previously utilized and no system functions are being modified or altered by this change.

2) Does the subject of this evaluation create the possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report?

This change does not change the operability or functionability of the ESF actuation system. Relocation of components from the Auxiliary Relay Cabinets to the Control Room without affecting system functions does not create the possibility of an accident of a different type than previously evaluated in the SAR.

Relocating the reset switches will not affect the operation or function of the FW and SB systems or the ESF actuation system or that of any safety-related system. Should these switches fail, this event would not create the possibility of a different type of malfunction not previously evaluated in the design basis accident analysis of the SAR as all the functions being performed by these components remain the same.

3) Does the subject of this evaluation reduce the margin of safety as defined in the basis for any technical specification?

Technical Specifications 3/4.3.2 and 3/4.3.3 were reviewed and the operational and functional requirements of the FW and SB systems are not affected by this change. Relocation of components with all functions remaining the same does not reduce the margin of safety as defined in the bases for the Technical Specifications affected by this change.

Based upon the above, there is no unreviewed safety question.

Approved: 1/30/90

Unreviewed Safety Question Evaluation #89-268

Subject: MSIV Control Logic

Description: This change will serve to prevent "auto-opening" of the MSIV's and MSIV bypass valves when the safety grade solenoids are reset.

Safety Evaluation:

1) Does the subject of this evaluation increase the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report?

   The safety-related function and operation of the valves remain unchanged. This change is consistent with the Control Room Design Review (CRDR) criteria and meets the intent of the original CRDR to use non-safety switches as permissives. Electrical isolation between the nonsafety-related portion of the circuit and the safety-related portion has been provided by use of eight spare isolation relays.

2) Does the subject of this evaluation create the possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report?

   Since the valve will not "AUTO OPEN" and operation requires operator action to open the valve, this change is considered an enhancement to the system. All safety functions and operation remain unchanged.

3) Does the subject of this evaluation reduce the margin of safety as defined in the basis for any technical specification?

   This change does not affect the valve's ability to close upon receipt of an isolation signal and therefore has no impact on the margin of safety as defined in the Technical Specification.

Based upon the above, there is no unreviewed safety question.

Approved: 1/24/90

Unreviewed Safety Question Evaluation #89-269

Subject: Feedwater System

Description: This change is a correction of a valve number on a P&ID of the Feedwater System.

Safety Evaluation:

1) Does the subject of this evaluation increase the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report?

   This change corrects a valve number shown on a P&ID. There is no change in the hardware, its location, operation of the valve, or operating procedures. The change does not increase the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report.

2) Does the subject of this evaluation create the possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report?

   Based on the information in (1), this change does not create the possibility for an accident or malfunction of equipment important to safety of a different type than any evaluated previously in the safety analysis report.

3) Does the subject of this evaluation reduce the margin of safety as defined in the basis for any technical specification?

   Based on the information in (1), this change does not reduce the margin of safety as defined in the basis for any technical specification.

Based upon the above, there is no unreviewed safety question.

Approved: 1/19/90

Unreviewed Safety Question Evaluation #89-270

Subject: Turbine Generator Building (TGB) Sump

Description: This temporary modification provides a path for pumping TGB Sump #2 to the Condensate Polishing (CP) Sump, and provide condensate blowdown to the CP sump.

Safety Evaluation:

1) Does the subject of this evaluation increase the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report?

   Since the subject systems perform no safety function, failure of the systems will not prevent a safe shutdown. Potential flooding will not affect any ESF system. The discharge of the CP sump will be monitored to preclude impacting the Environmental Report. Therefore, there is no increase in the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report.

2) Does the subject of this evaluation create the possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report?

   The subject systems perform no safety function, their failure will not prevent safe shutdown, and there is no safety-related equipment in the area. The change does not create the possibility for an accident or malfunction of equipment important to safety of a different type than any evaluated previously in the safety analysis report.

3) Does the subject of this evaluation reduce the margin of safety as defined in the basis for any technical specification?

   Condensate inventory control and sump discharges are not addressed in Technical Specifications. This change does not reduce the margin of safety as defined in the basis for any Tech. Spec.

Based upon the above, there is no unreviewed safety question.

Approved: 2/07/90

Unreviewed Safety Question Evaluation #89-271

Subject: Main Steam Line Isolation Bypass Valves

Description: Main Steam Line Isolation Bypass Valves FV-7412, FV-7422, FV-7432, and FV-7442 are depicted on the P&ID as being gate valves. The P&ID is to be revised to show them as being globe valves to reflect as-built condition.

Safety Evaluation:

1) Does the subject of this evaluation increase the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report?

   Changing the subject valves from gate valves to globe valves on the P&ID does not change the system design or operation. There is no impact on radiological consequences, nor is there any impact on equipment important to safety. Therefore, the change does not increase the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report.

2) Does the subject of this evaluation create the possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report?

   This change does not change the operability or functionability of the main steam system. It does not create the possibility for an accident or malfunction of equipment important to safety of a different type than any evaluated previously in the safety analysis report.

3) Does the subject of this evaluation reduce the margin of safety as defined in the basis for any technical specification?

   Review of the Tech. Specs. indicates that operational and functional requirements of the main steam system are not affected by this change. Therefore, the proposed change does not reduce the margin of safety as defined in the bases for any Technical Specification.

Based upon the above, there is no unreviewed safety question.

Approved: 01/04/90

Unreviewed Safety Question Evaluation #89-272

Subject: Liquid Waste Processing System

Description: The P&ID shows two isolation valves between the Spent Resin Storage Tank and the Spent Resin Sluice Pump. However, only one was installed. One valve will be deleted from the P&ID.

Safety Evaluation:

1) Does the subject of this evaluation increase the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report?

   The proposed change will cause only administrative changes. The physical configuration of Unit 1 will not change. Deletion of WL-1202 from the P&ID can not cause the quantities or concentrations of liquid effluents discharged from STPEGS to increase. The LWPS will operate as designed whether or not the proposed change is implemented.

   The safety analyses and failure modes effects analyses do not require redundant isolation capability between the SRST and the SRSP. The procedures described in the FSAR and other SAR documents, upon which the safety analyses for waste disposal and off-site doses were based, do not require redundant isolation capability and are not affected by this change. The actual waste disposal/processing activities at STPEGS will not change as a result of this change

   Therefore, the proposed change does not increase the probability of the consequences of an accident or malfunction of equipment that is important to safety that has been analyzed previously.

2) Does the subject of this evaluation create the possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report?

   See (1). The proposed change does not create the possibility of an accident or malfunction of equipment important-to-safety that has not been analyzed previously.

Unreviewed Safety Question Evaluation #89-272 (Cont'd)

3) Does the subject of this evaluation reduce the margin of safety as defined in the basis for any technical specification?

The proposed change will not affect operation of the LWPS. The quantities and concentrations of liquid effluents released from STPEGS will not increase as a result of this change. As such the off-site doses previously determined for STPEGS will not increase. The margins of safety as defined in the bases of Technical Specifications 3/4.11.1.1, 3/4.11.1.2, 3/4.11.1.3, 3/4.11.1.4, and 3/4.11.4 will remain unchanged if the proposed change is implemented.

Based upon the above, there is no unreviewed safety question.

Approved: 1/04/90

Unreviewed Safety Question Evaluation #89-273

Subject: Lube Oil System

Description: This change corrects a typographical error on a P&ID so that high point vent valve tag number LO-091 is changed to LO-0191.

Safety Evaluation:

1) Does the subject of this evaluation increase the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report?

   This valve is only used to vent the line during system startup. The correction does not change the system design or operation, alter any assumptions or conclusions previously made, or result in an increase in accident doses for accidents previously evaluated in the safety analysis report. There is no increase in the probability of occurrence or the consequences of an accident previously evaluated in the safety analysis report.

   The change does not impact directly or indirectly any equipment important to safety as defined in the safety analysis report. No additional physical changes to equipment, piping, or layout are proposed. There is no increase in the probability of occurrence or the consequences of a malfunction of equipment important to safety previously evaluated in the safety analysis report.

2) Does the subject of this evaluation create the possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report?

   This change does not change the operability or functionability of the system. The change does not create the possibility for an accident or malfunction of equipment important to safety of a different type than any evaluated previously in the safety analysis report.

3) Does the subject of this evaluation reduce the margin of safety as defined in the basis for any technical specification?

   The operational and functional requirements of the Lube Oil System are not affected by this change. The change does not reduce the margin of safety as defined in the bases for any Technical Specification.

Based upon the above, there is no unreviewed safety question.

Approved: 1/04/90

Unreviewed Safety Question Evaluation #89-277

Subject: Feedwater Valve

Description: Valve #2FW485, providing Deaerator Drain to Condenser isolation, currently a 600# gate valve, is to be replaced with a 900# globe valve. Its function is to drain the deaerator storage tank to the condenser.

Safety Evaluation:

1) Does the subject of this evaluation increase the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report?

   The type of valve used in this application has no effect on factors related to the probability of occurrence of an accident evaluated in the safety analysis report. The valve is not in the vicinity of equipment important to safety, and is not used to offset or mitigate the consequences of a malfunction of equipment important to safety. Therefore, there is no increase in the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report.

2) Does the subject of this evaluation create the possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report?

   Except that the globe valve is better suited to flow throttling than the gate valve, the valves function in the same manner. Furthermore, failure of the valve would not affect any equipment important to safety. Therefore, the change does not create the possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report.

3) Does the subject of this evaluation reduce the margin of safety as defined in the basis for any technical specification?

   Tech. Specs. addressing the Feedwater System are concerned with isolating feedwater flow to the steam generators, and the subject valve does not affect Feedwater Isolation. Therefore, this change does not reduce the margin of safety as defined in the basis for any technical specification.

Based upon the above, there is no unreviewed safety question.

Approved: 12/27/89

Unreviewed Safety Question Evaluation #89-274

Subject: Reactor Makeup Water System

Description: The system P&ID is to be revised to show valve RM-0060 as a ball valve rather than a gate valve. This is a normally closed vent valve to the Reactor Makeup Water Storage Tank and only used during tank fill.

Safety Evaluation:

1) Does the subject of this evaluation increase the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report?

   The correction does not change the system design or operation, alter any assumptions or conclusions previously made, or result in an increase in accident doses for accidents previously evaluated in the safety analysis report. There is no increase in the probability of occurrence or the consequences of an accident previously evaluated in the safety analysis report.

   The change does not impact directly or indirectly any equipment important to safety as defined in the safety analysis report. There is no impact to pipe stress or supports. There is no increase in the probability of occurrence or the consequences of a malfunction of equipment important to safety previously evaluated in the safety analysis report.

2) Does the subject of this evaluation create the possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report?

   This change does not change the operability or functionability of the system. The change does not create the possibility for an accident or malfunction of equipment important to safety of a different type than any evaluated previously in the safety analysis report.

3) Does the subject of this evaluation reduce the margin of safety as defined in the basis for any technical specification?

   The operational and functional requirements of the system are not affected by this change. The change does not reduce the margin of safety as defined in the bases for any Technical Specification.

Based upon the above, there is no unreviewed safety question.

Approved: 1/04/90

Unreviewed Safety Question Evaluation #89-275

Subject: Condensate Drain Valves

Description: The valve numbers of 1" drain valves will be corrected. The valves are correctly identified in the field and are also correctly identified on the Valve Master File List. The drain line whose size is being corrected from 1" to 2" on the P&ID is also nonsafety-related and serves nonsafety-related equipment.

Safety Evaluation:

1) Does the subject of this evaluation increase the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report?

   The valves and the equipment they serve are not safety-related. Only the identification of the valve will change on the P&ID. The valves will have the same form, fit and function after the change as they did before the change. A physical change to the drain line will not occur as a result of the proposed change. The potentially increased flooding (due to the larger line size) is bounded by the floods that would occur due to postulated breaks in nearby larger pipes. Therefore, there is no increase in the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report.

2) Does the subject of this evaluation create the possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report?

   See discussion under (1). The proposed change does not create the possibility of an accident or the possibility of a malfunction of equipment important to safety that has not been previously evaluated in the FSAR.

Unreviewed Safety Question Evaluation #89-275 (Cont'd)

3) Does the subject of this evaluation reduce the margin of safety as defined in the basis for any technical specification?

The proposed change does not impact the safety functions of equipment important to safety. The proposed change does not cause a physical change to the facility or a change in labelling. The increased size of the drain line containing Valve CD-0421 does not create a potential leak or high-energy water spray that could increase the challenges placed upon equipment important to safety. Therefore, the proposed change does not reduce the margin of safety as defined in any of the Technical Specifications.

Based upon the above, there is no unreviewed safety question.

Approved: 1/04/90

Unreviewed Safety Question Evaluation #90-001

Subject: Letdown Orifice Header Isolation Valve

Description: Valve FV-0011 is to be added between the regenerative heat exchanger and the letdown orifices.

Safety Evaluation:

1) Does the subject of this evaluation increase the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report?

   The letdown line and the excess letdown line are not needed for the safe shutdown of the plant, for accident mitigation, or for reactor coolant pressure boundary integrity. Isolation of the RCS may be accomplished using the letdown isolation valves (LCV-0465 and LCV-0468) on the letdown line and MOV-0082 and MOV-0083 on the excess letdown line.

   The subject of this review should have no effect on the probability of occurrence or an accident as previously evaluated in the safety analysis report.

   Since the new letdown orifice header isolation valve provides a more leak-tight seal, the subject of this review will decrease the probability of occurrence of a malfunction of equipment important to safety.

2) Does the subject of this evaluation create the possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report?

   The bases for this evaluation are the same as those in 1. Therefore, the change does not create the possibility for an accident or malfunction of equipment important to safety of a different type than any evaluated previously in the safety analysis report.

Unreviewed Safety Question Evaluation #90-001 (Cont'd)

3) Does the subject of this evaluation reduce the margin of safety as defined in the basis for any technical specification?

The letdown function and the excess letdown function of the CVCS affected by the subject of this evaluation are not addressed in the Technical Specifications. The subject of this evaluation does not impact Containment Isolation, which is the only portion of the CVCS addressed by any Technical Specification. The changes addressed by this USQE do not impact the bases for any Technical Specification.

Based upon the above, there is no unreviewed safety question.

Approved: 1/30/90

Unreviewed Safety Question Evaluation #90-002

Subject: Reactor Containment Building Radiation Zones

Description: The radiation zones are to be revised during fuel transfer to reflect results of radiation surveys conducted during fuel transfer. No plant structures, systems, or components are affected by this change.

Safety Evaluation:

1) Does the subject of this evaluation increase the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report?

   The proposed revision applies to personnel exposure and does not increase the probability of previously evaluated accidents. The increased radiation zones reflect the "as-measured" dose rates during fuel transfer only. These radiation levels do not contribute to the accident consequences since they are within the plant. There is no impact on equipment required to mitigate the consequences of an accident. While there might be a slight increase in the dose in adjacent areas, this is insignificant compared to accident doses used in qualification of safety-related equipment.

2) Does the subject of this evaluation create the possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report?

   The change does not create the possibility for a new or different accident because this change does not modify or otherwise change plant systems, components, or structures. Increased dosage to safety-related equipment in the subject areas would be insignificant in comparison with qualification levels. The ability of required equipment to operate in an accident environment has been previously evaluated.

3) Does the subject of this evaluation reduce the margin of safety as defined in the basis for any technical specification?

   The radiation zones applicable to differing operational modes are not subject to the Technical Specifications. Therefore, the margin of safety as defined in the bases is unchanged.

Based upon the above, there is no unreviewed safety question.

Approved: 4/01/90

Unreviewed Safety Question Evaluation #90-007

Subject: Borated Refueling Cavity Water

Description: The SAR is to be revised to remove the statement that stud holes are never exposed to borated refueling cavity water. The stud holes are sealed to prevent such exposure. This is in accordance with Regulatory Guide 1.65.

Safety Evaluation:

1) Does the subject of this evaluation increase the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report?

The design basis loss of coolant accidents are not affected by the subject SAR change. This change only revises the statement concerning the closure stud holes never being exposed to borated refueling water. Removal of this statement does not increase the probability of occurrence of any design basis accident.

The subject SAR revision does not increase the consequences of a previously evaluated accident. Exposure of the closure bolt holes to borated refueling water is prevented by stud hole plugs. Even if exposure were postulated, the inspections performed would eliminate the potential for corrosion. Therefore, there is no failure potential which would increase the consequences of previously evaluated accident.

The probability of safety-related equipment malfunction is not changed by the subject SAR revision. Corrosion of vessel closure studs, nuts, washers, and bolt holes is prevented by existing plant design and procedures. Consequently this change has no impact on the operability of any safety-related equipment.

The consequences of equipment malfunction previously evaluated are unchanged since the malfunctions postulated in the SAR have no effect on the vessel closure bolt holes. Failure of the vessel closure bolt holes or studs due to the subject change is not credible.

Unreviewed Safety Question Evaluation #90-007 (Cont'd)

2) Does the subject of this evaluation create the possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report?

Failure of the reactor vessel closure studs or bolt holes is not an event evaluated in the SAR. This accident is not evaluated since it is not a credible event. The reactor vessel closure fasteners are designed in accordance with the applicable standards and nondestructively examined. In addition to these inspections, preservice and inservice inspections are performed in accordance with ASME Section XI and RG 1.65. Adequate design features, procedures and controls have been established to ensure that the possibility of corrosion effects are minimized. The subject change does not modify or otherwise change any existing provisions to prevent boron induced corrosion. Therefore, the conclusion that failure of the vessel closure mechanism is not a credible event is unchanged.

The subject SAR revision does not create the possibility of a new type of safety-related equipment malfunction. Failure of the vessel closure mechanism is not considered a credible event. The possibility of leakage of borated reactor coolant at rates below the TS limits was investigated and evaluated in the HL&P response to Generic Letter 88-05.

3) Does the subject of this evaluation reduce the margin of safety as defined in the basis for any technical specification?

The subject of this review is not incorporated in any Technical Specification. Thus, it is not included in the TS bases and cannot reduce the defined margin of safety.

Based upon the above, there is no unreviewed safety question.

Approved: 3/05/90

Unreviewed Safety Question Evaluation #90-008

Subject: Chemical Volume and Control System (CVCS)

Description: The existing Kerotest valves CV-0015 and CV-0016 in the letdown portion of the CVCS are to be replaced with Dragon globe valves.

Safety Evaluation:

1) Does the subject of this evaluation increase the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report?

   The new valves will serve the same function as the previous ones (throttling). Seismic calculations show that the new valves have no adverse effects. Equipment qualification is not adversely affected. Only the valve type and tag number are being changed. The intended function of the valve remains unchanged. Therefore, there is no increase in the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report.

2) Does the subject of this evaluation create the possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report?

   This modification changes only the valve type. The function, location, quality class, seismic and environmental qualifications, and HELBA analyses are not changed. This change does not create the possibility for an accident or malfunction of equipment important to safety of a different type than any evaluated previously in the safety analysis report.

3) Does the subject of this evaluation reduce the margin of safety as defined in the basis for any technical specification?

   The letdown function of the CVCS is not covered by the technical specifications. Thus, the margin of safety is not effected by the change of valve type.

Based upon the above, there is no unreviewed safety question.

Approved: 1/23/90

Unreviewed Safety Question Evaluation #90-009

Subject: Condensate Storage

Description: Condensate Storage valve DW-0883 is to be classified as a normally open valve to facilitate filling of the loop seal for the Auxiliary Feedwater Storage Tank.

Safety Evaluation:

1) Does the subject of this evaluation increase the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report?

The proposed change removes one of the isolation barriers that prevent the water in the loop-seal from leaking back into the DW system. The loop-seal serves to prevent formation of a vacuum in the AFWST and to prevent the Nitrogen cover gas in the AFWST from leaking to the atmosphere. Leakage of the water from the loop-seal will be unlikely even if valve DW-0883 is normally open because valve DW-1658 still isolates the fill line from the DW system. However, should leakage occur, there will be no deleterious effects upon the safety of operations. Should the loop-seal be evacuated, air would have a free path into the AFWST to prevent vacuum formation.

The Nitrogen cover gas would most likely vent to the atmosphere or at least be diluted to a great extent by the inrush of outside air. This cover gas serves a maintenance function in that it inhibits dissolution of oxygen into the AFWST water. While use of the cover gas is good practice, the gas does not serve a safety function. The water volume within the AFWST is not dependent upon the cover gas pressure and the chemistry of the water has no affect upon the ability of the AF system and the AFWST to perform their intended functions.

Loss of the Nitrogen cover gas is inherent in the design basis accident (DBA) analyses. Both of the isolation valves are not safety-related and therefore must be assumed to fail or be otherwise unavailable during and after a DBA. Redundant paths exist to fill the AFWST, the loop-seal fill line is not used for this purpose.

Unreviewed Safety Question Evaluation #90-009 (Cont'd)

The Technical Specifications (TS), the reliability analyses, the failure modes and effects analyses (FMEAs), and the DBA analyses require the AFWST to contain enough water to maintain adequate cooling in the steam generators to maintain the Reactor Coolant System (RCS) at Hot Standby conditions for four hours with capacity thereafter to cool down the RCS to 350°F at a rate of 25°F per hour. The volume of water specified for this function is 518,000 gallons. During an accident, in order for the overfill line and the loop-seal fill line to represent leakage paths for the AFWST water, the volume of water in the AFWST would need to be in excess of 534,000 gallons. Therefore, the proposed change would not create or increase the probability of a new leakage path from the AFWST. Since the AFWST will still support the safety functions of the AF system, the proposed change does not affect the FMEAs, the reliability analyses, and the DBA analyses.

Given the above evaluation, the proposed change will not increase the probability of occurrence or the consequences of an accident or a malfunction of equipment important to safety that has been previously evaluated in the safety analysis report.

2) Does the subject of this evaluation create the possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report?

See response to (1). Therefore, the proposed change also does not create the possibility for an accident or malfunction of a different type than any previously evaluated in the safety analysis report.

3) Does the subject of this evaluation reduce the margin of safety as defined in the basis for any technical specification?

The proposed change will not affect the volume of water in the AFWST. The loop-seal is not required to perform a safety function, and the loss of the water in the loop-seal (through drainage back into the DW system) will not allow water to drain from the AFWST unless the water level in the AFWST is above the specified limit of 518,000 gallons. The AF system and the AFWST will be able to perform their intended safety functions if valve DW-0883 (Unit 2 only) is normally open. Therefore, the margin of safety as defined in the Bases for TS 3/4.7.1.3 is not reduced by this proposed change.

Based upon the above, there is no unreviewed safety question.

Approved: 1/23/90

Unreviewed Safety Question Evaluation #90-010

Subject: Gaseous Waste Processing System

Description: A vent valve is to be added to the P&ID for the Gaseous Waste Processing System to reflect the as-built condition of Unit 1. This change reinstates the valve to the P&ID from which it was incorrectly deleted.

Safety Evaluation:

1) Does the subject of this evaluation increase the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report?

This change does not affect the system design basis or operation of the plant because this vent valve is normally closed and is manually opened only when venting of the line is required. Opening of this valve is in accordance with the WG system operating procedures which controls inadvertent opening of the valve. Therefore, this change does not increase the probability of occurrence of an accident previously evaluated in the UFSAR.

Failure of this normally closed vent valve would not result in a gaseous leak of a greater magnitude than the gaseous release from the WG system charcoal absorber tank. Therefore, this change does not increase the consequences of an accident previously evaluated in the UFSAR.

Addition of this normally closed high point vent valve does not affect the system design basis or operation of the plant. This change does not affect operability or functionability of the WG system and does not impact either directly or indirectly any equipment important to safety. Therefore, this change does not increase the probability of occurrence of a malfunction of equipment important to safety previously evaluated in the UFSAR.

Addition of this vent valve does not affect the system design basis or operation of the plant. This valve is a normally closed vent valve and does not impact any equipment important to safety as defined in to the SAR nor does it increase the consequences of a malfunction of equipment important to safety previously evaluated in the UFSAR.

Unreviewed Safety Question Evaluation #90-010 (Cont'd)

2) Does the subject of this evaluation create the possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report?

Adding this normally closed vent valve does not affect the WG system operation or function. The vent valve affected by this change is located inside the Mechanical Auxiliary Building (MAB) and the effects of a failure of this normally closed vent valve would be confined to the MAB. This change does not impact any previous analyses for postulated gaseous leaks in piping, vessels or other equipment because rupture of the WG charcoal absorber tank would envelope the consequences of a failure of this valve. Should this valve fail (leak or break), this event would not create the possibility of an accident of a different type than previously evaluated in the UFSAR.

Addition of this normally closed high point vent valve (WG-0075) does not affect the operability and functionability of the WG system or that of any safety-related system. Should the valve fail, this event would not create the possibility of a different type of malfunction of equipment important to safety than previously evaluated in the UFSAR.

3) Does the subject of this evaluation reduce the margin of safety as defined in the basis for any technical specification?

Sections 3/4.11.2.4 and 3/4.7 of the Technical Specifications do not discuss or refer to use of high point vent valves. Vent valves for the WG system are not governed by any Technical Specification. Operational and functional requirements of the WG system are not changed by addition of this valve. Therefore, this change does not reduce the margin of safety as defined in the basis for any Technical Specification.

Based upon the above, there is no unreviewed safety question.

Approved: 8/23/90

Unreviewed Safety Question Evaluation #90-011

Subject: Make-Up Demineralizer

Description: This change corrects the location of the grab sample line and corrects the valve type symbol for XDW 1329 from a ball to a needle valve.

Safety Evaluation:

1) Does the subject of this evaluation increase the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report?

   These changes do not affect the system process. There is no impact on the ability of the system to perform its design function and no new failure modes/means are introduced. The demineralizer is not required for safe shutdown of the plant. All affected valves are isolation valves which upon failure would increase flow to drain system, and not adversely affect associated equipment. No new means of failure has been introduced. Therefore, there is no increase in the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report.

2) Does the subject of this evaluation create the possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report?

   The valves to be changed to reflect as-built conditions and will still function as isolation valves. The relocated grab sample will sample the same process flow and provide the same system integrity. All materials used are in accordance with specific system requirements. No additional risk to the system has been introduced as a result of these changes. Therefore, these changes do not create the possibility for an accident or malfunction of equipment important to safety of a different type than any evaluated previously in the safety analysis report.

3) Does the subject of this evaluation reduce the margin of safety as defined in the basis for any technical specification?

   The subject system is not governed by technical specifications. The changes do not affect other systems in a manner which could reduce the margin of safety as defined by the Tech. Specs.

Based upon the above, there is no unreviewed safety question.

Approved: 1/23/90

Unreviewed Safety Question Evaluation #90-012

Subject: Fuel Oil Supply System

Description: Drain valves are to be added to the P&ID's for the subject system. A vent valve is to be shown as normally closed. These changes update the P&ID to match the as-built condition.

Safety Evaluation:

1) Does the subject of this evaluation increase the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report?

   The fuel oil drain tank and the fuel oil transfer pump are nonsafety-related. The valves were constructed and supported as Seismic II/I. Failure of the drain valves would not decrease availability of the diesel generators to operate.

2) Does the subject of this evaluation create the possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report?

   The fuel oil drain tank and fuel oil transfer pump are not required for operation of the standby diesel generators (SDG). Since this equipment is not safety-related, and failure of the equipment will not affect operation of the SDG, inclusion in the Failure Modes and Effects Analysis is not required. Fire protection/prevention is provided. Therefore, this change does not create the possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report.

3) Does the subject of this evaluation reduce the margin of safety as defined in the basis for any technical specification?

   The fuel oil drain tank and fuel oil transfer pump are not needed for operation; therefore, this change does not affect or reduce the margin of safety as defined in the basis for the technical specifications.

Based upon the above, there is no unreviewed safety question.

Approved: 1/23/90

Unreviewed Safety Question Evaluation #90-013

Subject: Radiation Shielding

Description: Radiation shielding is to be added at the west wall of the Fuel Handling Building for the sludge lancing penetrations and for the Fuel Handling Building/Reactor Containment Building seismic joint.

Safety Evaluation:

1) Does the subject of this evaluation increase the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report?

   The only system-related change is rerouting of the sludge lancing piping on the outside of the Fuel Handling Building. The revisions are in a nonsafety-related portion of the piping. There is no impact on accidents addressed in FSAR Sections 6 and 15. The changes do not increase the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report.

2) Does the subject of this evaluation create the possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report?

   These changes do not create the possibility for an accident or malfunction of equipment important to safety of a different type than any evaluated previously in the safety analysis report since there is no impact to any equipment. The changes are in a nonsafety-related portion of the piping system and the piping runs have been found to meet the design requirements of FSAR Section 3.9.3. The structural changes meet Seismic II/I criteria where required. There is no impact on fire hazards and HELBA/MELBA evaluations.

3) Does the subject of this evaluation reduce the margin of safety as defined in the basis for any technical specification?

   There is no reduction in the margin of safety as defined in the basis for any technical specifications since the Tech. Specs. do not address the sludge lancing system and structural changes. There is no impact to the containment pressure boundary due to the sludge lancing piping revisions. There is no impact on any equipment or components discussed in the Tech. Specs.

Based upon the above, there is no unreviewed safety question.

Approved: 1/30/90

Unreviewed Safety Question Evaluation #90-014

Subject: Access to High Radiation Areas

Description: Locked access doors are to be provided to control access into high radiation areas.

Safety Evaluation:

1) Does the subject of this evaluation increase the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report?

The Fire Hazards analysis for the RCB takes credit for 20 feet separation (Appendix R requirement) and installed fire suppression. It did not take credit for manual fire fighting. Without manual fire fighting, it was shown by the analysis that STP had redundant capability for performing a safe shutdown following a fire. Addition of doors in the RCB have no impact on the fire hazards safe shutdown analysis. The FHAR figures are being revised for configuration control and to inform the Fire Brigade of change in the configuration of the area.

The Fire Brigade will be able to access the areas beyond the locked access doors. Addition of the doors does not affect the basis for the radiation levels shown on the radiation zone drawings. Therefore, the subject of this change does not increase the probability of occurrence of an accident as previously described in the SAR.

Since the FHAR analyzed the worst case scenario (ability to safely shutdown without taking credit for manual fire fighting) and the radiation zones are left unchanged, addition of locked access doors would not increase the consequences of an accident previously evaluated in the SAR. There is no impact to the H_2 (post-LOCA) generation analysis nor the containment P T analysis as a result of addition of the galvanized material.

The subject of this evaluation is not involved with any safety-related equipment or systems. Therefore, the subject of this evaluation does not increase the probability of occurrence or consequences of a malfunction of equipment important to safety previously evaluated in the SAR.

Unreviewed Safety Question Evaluation #90-014 (Cont'd)

2) Does the subject of this evaluation create the possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report?

The subject of this evaluation does not affect any systems or equipment. The subject of this evaluation would provide a stronger ALARA program by preventing personnel from entering high radiation areas. The subject of this evaluation does not create the possibility of an accident or malfunction of equipment important to safety of a different type than any previously evaluated in the SAR.

3) Does the subject of this evaluation reduce the margin of safety as defined in the basis for any technical specification?

Addition of the doors is for the purpose of complying with Technical Specification 6.12.2 to prevent access to high radiation areas. Therefore, there is no reduction in the margin of safety defined in the basis of any Technical Specification.

Based upon the above, there is no unreviewed safety question.

Approved: 1/30/90

Unreviewed Safety Question Evaluation #90-015

Subject: Secondary Makeup Tank Level

Description: A high level annunciator window and a level indicator are to be installed in the Control Room to monitor the Secondary Makeup Tank Level.

Safety Evaluation:

1) Does the subject of this evaluation increase the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report?

The subject of this evaluation does not increase the probability of occurrence of an accident or malfunction previously evaluated in the SAR. The Secondary Makeup Tank (SMUT) is not safety-related and its primary function is to provide condensate makeup water to the turbine condensate system. It has no function necessary for achieving safe shutdown of the plant or for accident prevention, and its failure will not affect safety-related systems. The minimum and maximum tank levels are not specified in the FSAR. The setpoints are being lowered by this change to allow CR operator proper response time to secure the SMUT and to prevent it from overflowing. The annunciator window and the level indicator are being installed to aid the operator in monitoring the tank level.

The subject of this evaluation does not increase the consequences of an accident previously evaluated in the SAR. The increase in combustible loading, as the result of addition of the annunciator window, is still bounded by the previous analysis provided in the FHAR for the affected firezones. The weight of added cable to each affected firezone is small compared to the margin given in the FHAR.

The subject of this evaluation does not increase the probability of occurrence of a malfunction of equipment important to safety as previously evaluated in the SAR. The SMUT, its associated piping, and valves do not connect to any Important-To-Safety (ITS) equipment. Additionally, the added annunciator window and the level indicator for the SMUT are also not connected to any ITS equipment. The added components are to be installed in nonsafety-related panel ZCP008 and they follow the specifications for material and workmanship as other existing panel equipment.

Unreviewed Safety Question Evaluation #90-015 (Cont'd)

The added components aid the operator in monitoring the SMUT level and they do not affect the operability of any existing ITS equipment. In the event of the annunciator window failure, the operator can rely on the display provided on PROTEUS computer. If the indicator fails, the operator can use PROTEUS computer point for level display. The failure of added components do not degrade nor impact any ITS equipment because the added components are being used by operator for the purpose of displaying and alarming only.

The subject of this evaluation does not increase the consequences of a malfunction of equipment important to safety as previously evaluated in the SAR. The added annunciator window and the level indicator for the SMUT are not connected to any ITS equipment. The annunciator window failure does not affect any boundary equipment because the window is the alarm output of an unique computer input point. Likewise, the indicator failure does not affect any boundary equipment since the indicator is being used for display only and not for accident prevention nor plant shutdown.

2) Does the subject of this evaluation create the possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report?

The subject of this evaluation does not create the possibility of an accident of a different type than any previously evaluated in the SAR. Addition of the annunciator window and the level indicator is to aid the operator in monitoring the tank level. These instruments have no function necessary for achieving safe shutdown or for accident prevention or mitigation.

The subject of this evaluation does not create the possibility of a different type of malfunction of equipment important to safety than any previously evaluated in the SAR. The SMUT and its associated piping, valves and instrumentation do not interface with any Important-To-Safety (ITS) equipment. The added annunciator window and the level indicator have no impact to any ITS equipment.

Unreviewed Safety Question Evaluation #90-015 (Cont'd)

3) Does the subject of this evaluation reduce the margin of safety as defined in the basis for any technical specification?

The subject of this evaluation does not reduce the margin of safety as defined in the bases for any Technical Specifications. The SMUT and its associated piping, valves and instrumentation are not governed under any Technical Specifications.

Based upon the above, there is no unreviewed safety question.

Approved: 3/20/90

Unreviewed Safety Question Evaluation #90-016

Subject: Reactor Coolant System Draindown Level

Description: Wide range RCS level indication, associated tubing, hoses and fittings are to be added to replace the existing tygon tube configuration. This change is to provide reliable RCS level indication during reduced inventory conditions.

Safety Evaluation:

1) Does the subject of this evaluation increase the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report?

   This modification involves installation of non-permanent plant equipment which will be disconnected during normal plant operations. Installation of the level indicator, tubing hoses and fittings is in accordance with approved installation specifications and seismic II/I criteria. There is no impact on plant safety-related equipment and system response. There is no increase in the probability of occurrence or consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report.

2) Does the subject of this evaluation create the possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report?

   Installation is in accordance with the approved installation specifications and Seismic II/I criteria. Credible failure modes associated with the modification will not create the possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report.

3) Does the subject of this evaluation reduce the margin of safety as defined in the basis for any technical specification?

   Postulated credible failure modes have been evaluated for impact on plant safety-related equipment and systems, and no safety limits are challenged. This modification has no impact on safety limits and does not reduce the margin of safety as defined in the basis for any technical specification.

Based upon the above, there is no unreviewed safety question.

Approved: 2/17/90

Unreviewed Safety Question Evaluation #90-017

Subject: Battery Modification

Description: This temporary modification will provide for operation of a battery with two cells jumpered out. The two cells are weak and do not meet Technical Specification requirements.

Safety Evaluation:

1) Does the subject of this evaluation increase the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report?

   The battery is capable of performing its safety related function with the remaining 57 cells. The cabling and lugs used for cell jumpers will be approved for this application. Therefore, there is no increase in the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report.

2) Does the subject of this evaluation create the possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report?

   The battery is capable of performing its safety-related function with the remaining 57 cells. The cabling and lugs used for cell jumpers will be approved for this application. The modification does not create the possibility for an accident or malfunction of equipment important to safety of a different type than any evaluated previously in the safety analysis report.

3) Does the subject of this evaluation reduce the margin of safety as defined in the basis for any technical specification?

   The margin of safety as described in the basis for any technical specification is not reduced because the load profile that the battery is required to supply can be adequately supplied by the remaining 57 cells.

Based upon the above, there is no unreviewed safety question.

Approved: 4/01/90

Unreviewed Safety Question Evaluation #90-018

Subject: Condenser Vacuum Pump Discharge

Description: Condenser Vacuum Pump discharge is to be routed to the unit vent.

Safety Evaluation:

1) Does the subject of this evaluation increase the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report?

The subject of this evaluation consists of installing equipment which will make possible routing the Condenser Air Removal Pumps (CARS) discharge line to the unit vent located on the roof of the MAB. Any discharge containing radiation would be detected by the monitor. The CARS pumps are not required for safe shutdown nor is the CARS pumps discharge line safety-related. Any failure of the tie-in will not increase the probability of an accident, since the tie-in is located downstream of the radiation monitor. No additional radiation will be released if the tie-in point were to fail. The section of the unit vent to which the tie-in is being added is outside of the MAB and is not safety-related. Failure of this section of the unit vent will not impact safe shutdown of the plant. Once the discharge from the MAB gets into this section of the unit vent, there is no provision for stopping the flow to the atmosphere. The unit vent, Radiation Monitor RT-8010 and the tie-in point will all be fabricated to the same quality requirements (Class 7 and Seismic Category 1). Therefore, since these components are not safety-related and are not required to contain any radiation releases, the probability of an accident is not increased.

Failure of the discharge line tie-ins will not prevent the plant from achieving safe shutdown. Since the CARS pump discharge is neglected in the offsite dose calc manual's requirement for reporting of radioactive releases, (Section 2.1 Gaseous Release Points) unless activity is detected, if the CARS duct were to fail, the assumed flow currently referred to in Note V to Table 7.5-1 of the UFSAR could be used until such time as the duct were repaired. This situation does not mean that the consequences of an accident would be greater, since the primary to secondary leakage capability of the CARS monitor is being retained. Provisions for conforming to NUREG-0737 and Reg. Guide 1.97 are available should the discharge line fail. The CARS pumps will continue to discharge to the atmosphere and the unit vent will continue to monitor only MEAB effluents until all Licensing concerns have been addressed. The CARS will be isolated from the unit vent by a locked closed Butterfly valve (CR-0098) located under the roof of the TGB.

Unreviewed Safety Question Evaluation #90-018 (Cont'd)

2) Does the subject of this evaluation create the possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report?

Since none of the equipment in the subject of this re[illegible] safety-related, no accident involving the safe shut[illegible]e plant is possible. Analysis of this type of malfu[illegible]not required since the unit vent, radiation monitor ar[illegible]oint are all constructed to the same quality requirements. [illegible]CARS discharge line is not required for safe shutdown nor [illegible] support any equipment required for safe shutdown. The unit vent is Class 7; however, any malfunction of the CARS discharge line could not conceivably affect the unit vent.

Penetration into the unit vent was evaluated with respect to its impact on security, missile protection of safety-related components, and tornado affects to the MEAB. Although breach of the unit vent is a breach of a security barrier, this modification does not introduce any new pathways into the MEAB. The only missiles that could be generated would be those introduced by tornados. There is no direct target line between the duct penetration and any safety-related equipment; therefore, no additional missile protection is needed for this modification. There is a tornado damper inside the unit vent just before the unit vent exits the MEAB. Since the installation of the duct is located downstream of this tornado damper, this modification will not introduce any new pressurization or depressurization effects due to tornados.

3) Does the subject of this evaluation reduce the margin of safety as defined in the basis for any technical specification?

The technical specification requires that radiation monitor RT-8010 function properly or be fixed within 30 days. While the monitor is being repaired, manual sampling of the MAB discharge can be performed. Since the tie-in to the unit vent is upstream of the radiation monitor, any manual sampling of effluent will be monitored also. This change will not reduce the margin of safety in the technical specifications. The addition of the CARS pumps discharge line will not affect the radiation monitor RT-8027 since the tie-in is located downstream of the radiation monitor and the discharge is to the unit vent. The technical specification will be revised prior to use of this flow path to exclude the CARS discharge radiation monitor as an effluent monitor. The CARS monitor will still be used as a primary to secondary leakage detector and will still retain its capability to sample for iodines and particulates.

Based upon the above, there is no unreviewed safety question.

Approved: 2/17/90

Unreviewed Safety Question Evaluation #90-019

Subject: Quality Assurance During the Operations Phase

Description: This change to UFSAR Section 17.2 provides clarification of current practices and requirements.

Safety Evaluation:

1) Does the subject of this evaluation increase the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report?

   The changes do not change the quality inspections or attributes as required by the Operations Quality Assurance Program or any NRC commitments. Adequate controls are provided to meet existing NRC regulations. Thus, there is no increase in the probability of occurrence or the consequences of a accident or malfunction of equipment important to safety previously evaluated in the safety analysis report.

2) Does the subject of this evaluation create the possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report?

   Technical requirements associated with these changes are unchanged. Controls relative to equipment purchase, design, installation, test, modification, maintenance, etc, are unchanged. Therefore, the changes do not create the possibility for an accident or malfunction of equipment important to safety of a different type than any evaluated previously in the safety analysis report.

3) Does the subject of this evaluation reduce the margin of safety as defined in the basis for any technical specification?

   No changes are being made which are addressed in the basis for any technical specification.

Based upon the above, there is no unreviewed safety question.

Approved: 2/17/90

Unreviewed Safety Question Evaluation #90-020

Subject: Coatings of Sumps and Basins

Description: Coatings are to be added to the HTDS Containment Basin, Mixed Bed Regeneration Basin, Secondary Sidewater Structure Area, Neutralization Basin, and the three Acid/Caustic Basins in Unit 1. A sump with a valved drain line to the Chemical Waste System is added to the Secondary Sidewater Structure Area.

Safety Evaluation:

1) Does the subject of this evaluation increase the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report?

   The sump is located outside Category I buildings in a nonsafety-related structure; it does not affect safety-related systems. The sump is not designated as equipment important to safety. The sumps and the Chemical Waste System are not modeled as part of the accident/transient analyses. Since the sump is utilized to collect any Acid/Caustic solutions that may be spilled, it mitigates accidents involving these solutions. However, consequences are determined based on the accident dose analyses to the public. The dose analyses remain unchanged. Therefore, the change does not increase the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report.

2) Does the subject of this evaluation create the possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report?

   Since the sump is located outside Category I buildings in a nonsafety-related structure, it does not affect safety-related systems or components and is not designated as equipment important to safety. Since the sump is utilized to collect any Acid/Caustic solutions that may be spilled, it mitigates accidents involving these solutions. Thus, the subject of this evaluation does not create the possibility of an accident of a different type or a different type of malfunction of equipment important to safety than any previously evaluated in the SAR.

Unreviewed Safety Question Evaluation #90-020 (Cont'd)

3) Does the subject of this evaluation reduce the margin of safety as defined in the basis for any technical specification?

Addition of a sump and drain line to the Chemical Waste System is not covered by any Technical Specifications. Thus, the subject of this evaluation does not reduce the margin of safety as defined in the basis for any Technical Specification.

Based upon the above, there is no unreviewed safety question.

Approved: 1/30/90

Unreviewed Safety Question Evaluation #90-021

Subject: Freeze Protection

Description: Temporary heat tracing is to be installed on nonsafety-related systems to protect them from freezing.

Safety Evaluation:

1) Does the subject of this evaluation increase the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report?

   These temporary modifications will not negatively affect operability of affected systems. The type of temporary insulation used will be compatible with present plant specifications for permanently installed insulation. The intent is to use the Plant Receptical distribution system and/or construction power. The power required will not overload the analyzed loading of these circuits. Installation of the temporary heat trace will be performed to meet specifications. This will meet all design requirements. All the Temp. Mods. are outside the power block; thus, there is no impact to any flood analyses, combustible loading, missile generation and/or design bases analyses.

   Based on the above, there is no increase in the probability of occurrence or consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report.

2) Does the subject of this evaluation create the possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report?

   See response to (1). This change does not create the possibility for an accident or malfunction of equipment important to safety of a different type than any evaluated previously in the safety analysis report.

3) Does the subject of this evaluation reduce the margin of safety as defined in the basis for any technical specification?

   See response to (1). This change does not reduce the margin of safety as defined in the basis for any technical specification.

Based upon the above, there is no unreviewed safety question.

Approved: 2/05/90

Unreviewed Safety Question Evaluation #90-022

Subject: Rod Cluster Control Change Tool

Description: The fuel handling machine crane rail stops are being relocated to allow the fuel handling tool access to the northernmost cells in the high density spent fuel racks.

Safety Evaluation:

1) Does the subject of this evaluation increase the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report?

   This change constitutes a minor change to dimensions on a general arrangement drawing. The integrity of the crane rail is maintained since the work will be accomplished in accordance with AISC and standard site procedures. Adequate separation is maintained between the fuel handling machine and the HVAC duct attached to the FHB north wall. A minimum of one inch separation will be maintained which is sufficient separation for seismic concerns.

   Since all safety-related systems and components maintain their integrity, there is no increase in the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report.

2) Does the subject of this evaluation create the possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report?

   See discussion under (1). Since all safety-related systems and components maintain their integrity, this changes does not create the possibility for an accident or malfunction of equipment important to safety of a different type than any evaluated previously in the safety analysis report.

3) Does the subject of this evaluation reduce the margin of safety as defined in the basis for any technical specification?

   See discussion under (1). Since all safety-related systems and components maintain their integrity, this change does not reduce the margin of safety as defined in the basis for any technical specification.

Based upon the above, there is no unreviewed safety question.

Approved: 7/6/90

Unreviewed Safety Question Evaluation #90-023

Subject: Auxiliary Feedwater (AF) System

Description: Valve MS-0514 is shown on the P&ID as a gate valve. The P&ID is being revised to show it as a globe valve. The change does not cause a physical change to any components or systems.

Safety Evaluation:

1) Does the subject of this evaluation increase the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report?

The design calculations for the AFTDP and the MS subsystem do not account for the type of valve used for the trip-and-throttle valve. The flow losses in the MS subsystem piping are calculated up to the inlet to the trip-and-throttle valve, the point for which test data is known. Therefore, the editorial change of the valve symbol for MS-0514 on the P&IDs will not affect the design of the AF system.

In the reliability analysis for the AF system (FSAR chapter 10.A), the type of valve used for the trip-and-throttle valve is not discussed. Generic valve data was used to determine the failure rate of valves in the reliability analysis. Therefore, the type of trip-and-throttle valve (gate versus globe, e.g.) does not affect the failure rate used in the reliability analysis. For the purposes of the reliability analysis, the proposed change will not increase the probability of a failure of the AF system to perform in response to an accident.

The failure modes are the same whether or not the trip-and-throttle valve is a gate valve or a globe valve. The effect of these failures on the AF system's safety function capability remains unchanged from that given in the FSAR and in MC-5694: if the valve is mispositioned, fails closed, or fails to open when required, then the motor-driven AF pumps will provide adequate flow. If the valve fails open or fails to close when required, then the MS flow to the AFTDP can be isolated by valve MS-0143. No other failure modes need to be postulated for the trip-and-throttle valve due to the proposed change. As such, the proposed change will not impact the AF system FMEA.

Unreviewed Safety Question Evaluation #90-023 (Cont'd)

Given the above evaluation, the proposed change will not increase the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety that has been previously evaluated in the safety analysis report.

2) Does the subject of this evaluation create the possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report?

See response under (1). Therefore, the proposed change will not create the possibility for an accident or a malfunction of a different type than any evaluated previously in the safety analysis report.

3) Does the subject of this evaluation reduce the margin of safety as defined in the basis for any technical specification?

The Bases for Technical Specification 3/4.7.1.2 require operability of the AF system to ensure the Reactor Coolant (RC) System can be cooled down to less than 350 degrees F from normal operating conditions in the event of a total loss-of-offsite power. Testing has confirmed that the AF system performs as designed with the valve installed.

Based upon the above, there is no unreviewed safety question.

Approved: 2/17/90

Unreviewed Safety Question Evaluation #90-024

Subject: Boron Recycle System

Description: The P&ID is being revised to add a valve number and to correctly indicate a pressure indicator which had been mistakenly identified as a pressure transmitter.

Safety Evaluation:

1) Does the subject of this evaluation increase the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report?

   This change does not affect the operation of any safety-related requirement. The change does not increase the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report.

2) Does the subject of this evaluation create the possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report?

   The original system design is unchanged, and operation of the system will not be affected. Therefore, the change does not create the possibility for an accident or malfunction of equipment important to safety of a different type than any evaluated previously in the safety analysis report.

3) Does the subject of this evaluation reduce the margin of safety as defined in the basis for any technical specification?

   The technical specifications are not affected by this change.

Based upon the above, there is no unreviewed safety question.

Approved: 2/17/90

Unreviewed Safety Question Evaluation #90-025

Subject: Condensate Polishing Waste Disposal System

Description: Valve CP-0678 is being renumbered as CP-0670 on the subject system Unit 1 P&ID.

Safety Evaluation:

1) Does the subject of this evaluation increase the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report?

   This change does not affect the operability or functionability of the system or impact any equipment important to safety.

2) Does the subject of this evaluation create the possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report?

   The change does not affect the operability or functionability of the system since the function of the valve has not been altered. There is no impact on any safety-related system.

3) Does the subject of this evaluation reduce the margin of safety as defined in the basis for any technical specification?

   This change does not affect the technical specifications.

Based upon the above, there is no unreviewed safety question.

Approved: 2/17/90

Unreviewed Safety Question Evaluation #90-026

Subject: Mechanical Auxiliary Building Chilled Water (CH) System

Description: The P&ID's are to be revised to reflect capillary tubing for the Chilled Water System.

Safety Evaluation:

1) Does the subject of this evaluation increase the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report?

This change does not increase the probability of occurrence of an accident previously evaluated in the SAR because including the subject capillary tubing for the input lines to MAB CH system instruments and to RCB CH system instruments on the respective Water Chiller outlet lines on the P&IDs to agree with installed configuration does not change the systems design or operation.

Chenging from instrument pipe to capillary tubing and will not change, degrade, or prevent actions; alter any assumptions or conclusions previously made; or result in any increase in accident doses for any accidents as previously evaluated in the SAR.

This change is to make the P&IDs agree with the vendor documents and the "as-built" conditions, and it does not affect the function of the MAB or RCB CH systems. This change is to the nonsafety-related part of the CH systems and changing from pipe to capillary tubing on the P&IDs does not impact either directly or indirectly any equipment Important to Safety (ITS) as defined in the SAR nor does it cause an increase in the probability of an accident or malfunction of ITS equipment previously evaluated in the SAR.

Changing these instrument lines on the P&IDs to capillary tubing does not affect the operability or functionability of the MAB or RCB CH systems because the vendor supplied instruments function the same as described in the SAR. Therefore, this change will not result in any increased consequences or changes in results, assuming a malfunction of ITS equipment, as defined in the design basis for the equipment Important to Safety previously evaluated in the SAR.

Unreviewed Safety Question Evaluation #90-026 (Cont'd)

2) Does the subject of this evaluation create the possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report?

This change will not create the possibility of an accident of a different type than previously evaluated in the SAR because these capillary tubing lines were installed during the original evaluation of the CH system and it does not change the operability or functionability of the system.

Changing the line designator to show capillary tubing this change will not affect the CH systems operation or function or that of any safety-related system, and since the capillary tubing was originally installed and the function of these instruments has not been changed, the Safety Analysis Report is not affected by this change. Should the line fail (leak or break), this event would not create a malfunction not previously evaluated in the design basis accident analysis nor does it create the possibility of a different type of malfunction of equipment important to safety than any previously evaluated in the SAR.

3) Does the subject of this evaluation reduce the margin of safety as defined in the basis for any technical specification?

Per review of Section 3/4.6.1.5, 3/4.7, and 3/4.7.13 of the Plant Technical Specifications, this change does not affect any items or activities as discussed in the Plant Technical Specifications. The type of line for these instruments in the MAB or RCB CH systems is not governed by any Plant Technical Specification.

Based upon the above, there is no unreviewed safety question.

Approved: 2/17/90

Unreviewed Safety Question Evaluation #90-027

Subject: Radioactive Liquid Filter Operations

Description: This change to procedure OPCP14-WS-0005 adds alternate methods for expended filter cartridge transfers.

Safety Evaluation:

1) Does the subject of this evaluation increase the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report?

   The expended cartridge filter transfer subsystem and associated equipment are not safety-related, part of a safety-related system, or connected to a safety-related system or component. Therefore, this change does not increase the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report.

2) Does the subject of this evaluation create the possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report?

   The expended cartridge filter transfer subsystem and associated equipment have no effect on the types of postulated accidents since this system has no role in accident initiation or mitigation. The expended cartridge filter transfer subsystem and associated equipment are not safety-related, part of a safety-related system, or connected to a safety-related system or component. Therefore, the subject of this evaluation does not create the possibility of an accident of a different type or a different type of malfunction of equipment important to safety than previously evaluated in the Safety Analysis Report.

3) Does the subject of this evaluation reduce the margin of safety as defined in the basis for any technical specification?

   The expended cartridge filter transfer subsystem and associated equipment are not considered in the technical specifications. Therefore, the subject of this evaluation will have no effect on the margin of safety as defined in the basis for any Technical Specification.

Based upon the above, there is no unreviewed safety question.

Approved: 4/22/90

Unreviewed Safety Question Evaluation #90-029

Subject: HVAC Essential Chilled Water System

Description: This change to the subject system P&ID is to correct vent valve number CH-1691 to CH-1679.

Safety Evaluation:

1) Does the subject of this evaluation increase the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report?

   No accidents in the subject system are analyzed in the UFSAR. Correcting the vent valve number does not change, degrade, or prevent actions; alter any assumptions or conclusions previously made; or affect the radiological consequences of an accident. There is no impact on equipment important to safety. Therefore, this change does not increase the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the Safety Analysis Report.

2) Does the subject of this evaluation create the possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report?

   Correcting this vent valve number does not affect the operability and functionability of the subject system or that of any safety-related system. Should the valve fail, this event would not create the possibility of a different type of malfunction of equipment important to safety than previously evaluated in the UFSAR.

3) Does the subject of this evaluation reduce the margin of safety as defined in the basis for any technical specification?

   Section 3/4.7.14 of the Technical Specifications does not discuss or refer to the use of high point vent valves. Vent valves in the subject system are not governed by any Technical Specifications. The operational and functional requirements of the system are not changed by correcting the valve number. Therefore, this changes does not reduce the margin of safety as defined in the basis for any Technical Specification.

Based upon the above, there is no unreviewed safety question.

Approved: 2/26/90

Unreviewed Safety Question Evaluation #90-030

Subject: Essential Cooling Water System

Description: The P&ID is being revised to renumber valves, restore a bearing water line, and delete "LO" notation.

Safety Evaluation:

1) Does the subject of this evaluation increase the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report?

   This change does not increase the probability of occurrence of an accident previously evaluated in the SAR because changing the valve numbers, deleting the lock position notation and restoring previously deleted flow path for bearing water in the Unit 2 P&ID to agree with the Unit 1 P&ID and referenced design documents will not affect the function, normal operation, or accidents previously evaluated for the subject system as described in the SAR.

   These changes do not impact either directly or indirectly any equipment Important to Safety (ITS) as defined in the SAR nor does it cause an increase in the probability of an accident or malfunction of ITS equipment previously evaluated in the SAR.

   These changes do not affect the operability or functionability of the system because during normal operation the system is operated and functions the same as described in the SAR as shown on the Unit 1 P&ID. Therefore, this change will not result in any increased consequences or changes in results, assuming a malfunction of ITS equipment, as defined in the design basis for the equipment Important to Safety previously evaluated in the SAR.

2) Does the subject of this evaluation create the possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report?

   These changes will not create the possibility of an accident of a different type than previously evaluated in the SAR because valve tag numbers and lock position for the valves are not covered in the SAR, and the bearing water line was included in the original evaluation of the system and does not change the operability or functionability of the system since the normal operation and function has not been changed. Should the line fail (leak or break), this event would not create the possibility of a different type of malfunction of equipment important to safety than any previously evaluated in the SAR.

Unreviewed Safety Question Evaluation #90-030 (Cont'd)

3) Does the subject of this evaluation reduce the margin of safety as defined in the basis for any technical specification?

This change does not affect any items or activities as discussed in the Plant Technical specifications. The valve tag numbers or lock position for these valves and the adding the bearing water flow path in the subject system are not governed by any Plant Technical Specification.

Based upon the above, there is no unreviewed safety question.

Approved: 2/26/90

Unreviewed Safety Question Evaluation #90-031

Subject: Essential Cooling Water System

Description: The system P&ID's are to be revised to change blowdown valves from gate valves to globe valves.

Safety Evaluation:

1) Does the subject of this evaluation increase the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report?

This change does not increase the probability of occurrence of an accident previously evaluated in the SAR because changing the subject of solenoid-operated hydraulic valves from gate to globe valves does not change the ECW system design or operation.

The function of this valve is for blowdown of the chillers to the ECW sump, and changing from gate to globe valve does not change the system function and will not change, degrade, or prevent actions; alter any assumptions or conclusions previously made, or result in any increase in accident doses for any accidents as previously evaluated in the SAR.

Because the stress and support calculations for this system were performed using the globe valve with an operator weight of 422 lbs., there is no impact to the calculations. This change is made to agree with the vendor documentation and does not affect the function of the ECW system. Changing from gate to globe valve on the P&IDs does not impact either directly or indirectly any equipment Important to Safety (ITS) as defined in the SAR nor does it cause an increase in the probability of an accident or malfunction of ITS equipment previously evaluated in the SAR.

Changing these gate valves on the 4" line off the ECWS return line on the P&IDs to globe valves does not affect the operability or functionability of the EW system because the valves are operated and function the same. Therefore, this change will not result in any increased consequences or changes in results, assuming a malfunction of ITS equipment, as defined in the design basis for the equipment Important to Safety previously evaluated in the SAR.

Unreviewed Safety Question Evaluation #90-031 (Cont'd)

2) Does the subject of this evaluation create the possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report?

This change will not create the possibility of an accident of a different type than previously evaluated in the SAR because these valves were included in the original evaluation of the EW system and does not change the operability or functionability of the system since the function of this valve has not been changed.

Because changing the solenoid-operated hydraulic blowdown valve from gate to globe to agree with the vendor documentation will not affect the system operation or function or that of any safety-related system, as the function of this valve has not been changed, the Safety Analysis Report is not affected by this change. Should the line fail (leak or break), this event would not create a malfunction not previously evaluated in the design basis accident analysis nor does it create the possibility of a different type of malfunction of equipment important to safety than any previously evaluated in the SAR.

3) Does the subject of this evaluation reduce the margin of safety as defined in the basis for any technical specification?

Per review of Section 3/4.7.4 of the Plant Technical Specifications, this change does not affect any items or activities as discussed in the Plant Technical Specifications. The type of valve for these blowdown valves in the system is not governed by any Plant Technical Specification.

Based upon the above, there is no unreviewed safety question.

Approved: 2/26/90

Unreviewed Safety Question Evaluation #90-032

Subject: Fire Protection System

Description: A valve tag number on the system P&ID is being changed from FP-1548 to FP-1246.

Safety Evaluation:

1) Does the subject of this evaluation increase the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report?

   The change in tag number does not affect the operation of the fire protection system or components, nor does it affect any other system or component Important to Safety previously evaluated in the SAR.

2) Does the subject of this evaluation create the possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report?

   The change in tag number for the inspector test connection valve in the Lighting Diesel Generator Building Fire Protection System does not affect operation of the fire protection system or components, nor does it affect the fire hazards analysis or any other analysis described in the FSAR.

3) Does the subject of this evaluation reduce the margin of safety as defined in the basis for any technical specification?

   The Fire Protection Systems are not governed by any Technical Specification and the subject of this evaluation does not reduce the margin of safety as defined in the basis for any Technical Specifications.

Based upon the above, there is no unreviewed safety question.

Approved: 2/17/90

Unreviewed Safety Question Evaluation #90-033

Subject: Standby Diesel Generator Cooling Water Subsytem

Description: The subject system P&ID is being updated to reflect the "as-built" configuration.

Safety Evaluation:

1) Does the subject of this evaluation increase the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report?

   No physical changes were made to the system or the components as a result of this change. There is no affect on plant procedures, or operability or ability of the standby diesel generator to perform its safety function. Therefore, there is no increase in the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report.

2) Does the subject of this evaluation create the possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report?

   See (1). Therefore, this change will not create the possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report.

3) Does the subject of this evaluation reduce the margin of safety as defined in the basis for any technical specification?

   The system and components to be shown in the P&ID have functioned according to design. These changes do not reduce the margin of safety as defined in the bases for the technical specifications.

Based upon the above, there is no unreviewed safety question.

Approved: 5/15/90

Unreviewed Safety Question Evaluation #90-034

Subject: Control of Heavy Loads

Description: Safe load paths over the RHR heat exchanger are to be clarified. The change involving a revision to the safe load path for the Roto-Lok studs, nuts, washers, and stud tensioners also has no impact on the capability to remove decay heat.

ECW safe load paths are to be enhanced by providing mirror image pathways within each pump bay cubicle.

Safety Evaluation:

1) Does the subject of this evaluation increase the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report?

The probability of occurrence of the previously evaluated load handling accidents due to revision of the control of heavy loads procedure is unchanged. The proposed revisions to the safe load paths have no effect on these accidents since the paths do not cross over the spent fuel storage pool, the open reactor vessel, or equipment required to be operable to maintain decay heat removal.

Design features provided to mitigate the offsite dose consequences of this accident are not affected by the proposed changes to the safe load paths since the revised paths do not cross over any structures, systems, or components assumed to be operable to mitigate the consequences of the design basis accident or any other load drop accident previously evaluated. The consequences of loss of decay heat removal are unaffected due to the administrative requirements imposed by the control of heavy loads procedure. These administrative requirements ensure that the safe shutdown and decay heat removal capability assumed in the USAR and required by the technical specifications is unchanged.

The safety-related function of the ECW system is maintained since decay heat removal can be achieved despite loss of one of the three redundant ECW trains in the affected Unit. The administrative requirement to declare the ECW train inoperable during movement of heavy loads complies with the technical specification operability requirements in modes 1 - 4. Revised safe load paths for the Roto-lok tensioner, studs, nuts, and washers are based on as-built locations of the racks on the refueling floor. With the exception of the RHR heat exchanger hatch, these safe load path revisions do not introduce any new safety-related targets. Movement of this load over the 1B RHR

Unreviewed Safety Question Evaluation #90-034 (Cont'd)

loop heat exchanger is acceptable since only one RHR train is required to maintain decay heat removal during shutdown (two trains required to be operable to satisfy single failure) and train 1B will be declared inoperable while this load is being moved over the RHR train 1B hatch, or the polar crane will be used with suitable interfacing lift points to provide a 10/1 safety factor. Therefore, the probability of occurrence of a malfunction of equipment important to safety previously evaluated in the SAR is unchanged.

Systems needed to achieve safe shutdown are not considered as load/target combinations since safe shutdown will be achieved prior to moving heavy loads. Protection of the RHR and ECW systems required to be operable will be assured. As a result, there is no increase in the probability of occurrence of a malfunction of equipment important to safety previously evaluated in the SAR due to this revision in the safe load paths.

2) Does the subject of this evaluation create the possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report?

The safe shutdown function and decay heat removal capability of the ECW system is maintained by defining the safe load path to traverse only a single train. The safety-related function of the ECW system is therefore maintained since decay heat removal can be achieved with loss of one of the three redundant ECW trains in the affected Unit. Revised safe load paths for the Roto-lok tensioner, studs, nuts, and washers are based on as-built locations of the racks on the refueling floor. With the exception of the RHR heat exchanger hatch, these safe load path revisions do not introduce any new safety-related targets. Movement of this load over the 1B RHR loop is acceptable as discussed in (1). Unavailability of an RHR train during refueling has been previously evaluated and the minimum decay heat removal capability is specified in the STPEGS Technical Specifications. Therefore, the possibility of a different type of an accident or malfunction of equipment important to safety than previously evaluated in the SAR is not created.

3) Does the subject of this evaluation reduce the margin of safety as defined in the basis for any technical specification?

The margin of safety for the RHR system during refueling (Bases 3/4.9.8) is not reduced since the operability of at least two RHR loops will be maintained when the water level above the RPV flange is less than 23 feet.

Unreviewed Safety Question Evaluation #90-034 (Cont'd)

The margin of safety for the ECW system is not reduced since movement of heavy loads over a given ECW train will require declaring that train inoperable during operational modes 1 - 4. Declaring the affected ECW train inoperable while in modes 5 and 6, with the water level above the RPV flange less than 23 feet, ensures that the corresponding RHR system is not being relied upon to remove decay heat.

Based upon the above, there is no unreviewed safety question.

Approved: 5/1/90

Unreviewed Safety Question Evaluation #90-035

Subject: Condensate Polisher System (Unit 1)

Description: Portions of polypropylene-lined piping are to be replaced with non-lined pipe due to cracks in the existing lining. This is a temporary modification.

Safety Evaluation:

1) Does the subject of this evaluation increase the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report?

   The subject system performs no safety-related functions and failures of this system will not prevent a safe shutdown. Line breaks are bounded by the flooding calculations. Therefore, the change does not increase the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report.

2) Does the subject of this evaluation create the possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report?

   Since the subject system performs no safety function, failure will not prevent a safe shutdown. Therefore, the change does not create the possibility for an accident or malfunction of equipment important to safety of a different type than any evaluated previously in the safety analysis report.

3) Does the subject of this evaluation reduce the margin of safety as defined in the basis for any technical specification?

   The subject system is not addressed in Tech Specs. Therefore, the margin of safety as defined on the basis for any Technical Specification is not reduced by the change.

Based upon the above, there is no unreviewed safety question.

Approved: 2/16/90

Unreviewed Safety Question Evaluation #90-036

Subject: Condensate Polisher System (Unit 2)

Description: Portions of polypropylene-lined piping are to be replaced with non-lined pipe due to cracks in the existing lining. This is a temporary modification.

Safety Evaluation:

1) Does the subject of this evaluation increase the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report?

   The subject system performs no safety-related functions and failures of this system will not prevent a safe shutdown. Line breaks are bounded by the flooding calculations. Therefore, the change does not increase the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report.

2) Does the subject of this evaluation create the possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report?

   Since the subject system performs no safety function, failure will not prevent a safe shutdown. Therefore, the change does not create the possibility for an accident or malfunction of equipment important to safety of a different type than any evaluated previously in the safety analysis report.

3) Does the subject of this evaluation reduce the margin of safety as defined in the basis for any technical specification?

   The subject system is not addressed in Tech. Specs. Therefore, the margin of safety as defined on the basis for any Technical Specification is not reduced by the change.

Based upon the above, there is no unreviewed safety question.

Approved: 2/16/90

Unreviewed Safety Question Evaluation #90-037

Subject: MSLB Containment Pressure/Temperature Analysis

Description: Incorrect time-zero mass/energy release data was used in calculation NC-7007. This change corrects the time-zero mass/energy release data for all MSLB cases analyzed in the calculation.

Safety Evaluation:

1) Does the subject of this evaluation increase the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report?

No operator actions are required or deleted by this change. The results of this change are bounded by the design limits of the plant. Therefore, the proposed change does not increase the probability of an accident previously evaluated in the Safety Analysis Report.

The results of this change are bounded by the current analysis. Therefore, the proposed change does not increase the consequences of an accident previously evaluated in the Safety Analysis Report.

The increased containment peak temperature resulting from the proposed change is bounded by the equipment qualification. Therefore, the proposed change does not increase the probability of occurrence of malfunction of equipment important to safety evaluated in the Safety Analysis Report.

The results of the proposed change show that the peak containment pressure and temperature is bounded by the analysis presented in the UFSAR. Therefore, the proposed change does not increase the consequences of malfunction of equipment important to safety evaluated in the Safety Analysis Report.

2) Does the subject of this evaluation create the possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report?

The results of this change are bounded by the current analysis. No physical plant changes are proposed. Therefore, the proposed change does not create the possibility of an accident of a different type than any previously evaluated in the Safety Analysis Report.

Unreviewed Safety Question Evaluation #90-037 (Cont'd)

The results of this change are bounded by the current equipment qualification. No physical plant changes are proposed. Therefore, the proposed change does not create the possibility of an accident of a different type than any previously evaluated in the Safety Analysis Report.

3) Does the subject of this evaluation reduce the margin of safety as defined in the basis for any technical specification?

With regard to containment structural integrity, the results of the proposed change show that peak containment temperature is bounded. With regard to equipment qualification, the results of the analysis show that the limits identified in the UFSAR Table 3.11-1 and SER Section 6.2.1.1.1 are not exceeded when rounded to the nearest significant figure. Therefore, the proposed change does not reduce the margin of safety as defined in the basis for any Technical Specifications.

Based upon the above, there is no unreviewed safety question.

Approved: 6/02/90

Unreviewed Safety Question Evaluation #90-039

Subject: Liquid Waste Processing (WL) System

Description: The P&ID for the subject system is being revised to add "locked closed" designation to valves 2R301T-WL-0636 and 2R302T-WL-0636 to reflect "as-built" conditions.

Safety Evaluation:

1) Does the subject of this evaluation increase the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report?

No accidents in the WL system are analyzed in the UFSAR. However, rupture to the Recycle Holdup Tank and Evaporator Concentrate Tank are analyzed in sections 15.7.2 and 15.7.3 of the UFSAR. These sections analyze the postulated radioactive releases to atmosphere or ground due to liquid-containing tank failure respectively. These valves are locked closed to prevent inadvertent opening of these drain valves which could result in a spill of radioactive material. Addition of this "locked closed" designation to these normally closed drain valves does not affect the system design basis or operation of the plant because these drain valves will be used only when draining the line is required. Therefore, this change does not increase the probability of occurrence of an accident previously evaluated in the UFSAR.

Addition of this "locked closed" designation to these normally closed drain valves does not change, degrade, or prevent actions; alter any assumptions or conclusions previously made; or result in any increase in accident doses for any accident. Therefore, this change does not increase the consequences of an accident previously evaluated in the UFSAR.

Addition of this "locked closed" designation to these normally closed drain valves does not affect the system design basis or operation of the plant. This change does not affect the operability or functionability of the WL system and does not impact either directly or indirectly any equipment important to safety. Therefore, this change does not increase the probability of occurrence of a malfunction of equipment important to safety previously evaluated in the UFSAR.

These valves are normally closed drain valves and do not impact any equipment important to safety as defined in the UFSAR nor do they increase the consequences of a malfunction of equipment important to safety previously evaluated in the UFSAR.

Unreviewed Safety Question Evaluation #90-039 (Cont'd)

2) Does the subject of this evaluation create the possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report?

Addition of this "locked closed" designation to these normally closed drain valves does not affect the operability and functionability of the WL system or that of any safety-related system. Should the valve fail, this event would not create the possibility an accident or a different type or a different type of malfunction of equipment important to safety than previously evaluated in the UFSAR.

3) Does the subject of this evaluation reduce the margin of safety as defined in the basis for any technical specification?

Sections 3/4.11.1.1 thru 3/4.11.1.4 of the Technical Specifications do not discuss or refer to the use of the "locked closed" designation to drain valves. Drain valves for the WL System are not governed by any Technical Specifications. Operational and functional requirements of the WL system are not changed by addition of this designation. Therefore, this change does not reduce the margin of safety as defined in the basis for any Technical Specification.

Based upon the above, there is no unreviewed safety question.

Approved: 3/12/90

Unreviewed Safety Question Evaluation #90-040

Subject: Regulatory Guide 1.74, "Quality Assurance Terms and Definitions"

Description: Regulatory Guide (RG) 1.74 is being deleted from FSAR Table 3.12-1. The regulatory guide has been withdrawn by the NRC because it is obsolete.

Safety Evaluation:

1) Does the subject of this evaluation increase the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report?

   The NRC has endorsed NQA-1-1983 which STPEGS is using to replace RG 1.74. The commitments in the SAR are not reduced by this change, and there is no effect on the function of equipment. The change is administrative in nature only. There is no increase in the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report.

2) Does the subject of this evaluation create the possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report?

   Technical requirements remain unchanged. Controls over quality covered by the UFSAR are not affected. Therefore, this change does not create the possibility for an accident or malfunction of equipment important to safety of a different type than any evaluated previously in the SAR.

3) Does the subject of this evaluation reduce the margin of safety as defined in the basis for any technical specification?

   No changes are being made that are addressed in the basis for any technical specification. There is no reduction in the margin of safety as defined in the basis for any technical specification.

Based upon the above, there is no unreviewed safety question.

Approved: 4/01/90

Unreviewed Safety Question Evaluation #90-041

Subject: Rapid Refueling

Description: USAR Section 9.1.4.2.2.2 requires that a vacuum be pulled on the reactor head prior to head movement to the wet storage stand so as to provide a water shield over the control rods which are withdrawn up into the head. This change makes drawing the vacuum permissive rather than mandatory. Need for the water shield is determined by the results of a radiation survey of the head.

Safety Evaluation:

1) Does the subject of this evaluation increase the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report?

   The water shield provided by the vacuum has ALARA considerations, but is not associated with any safety analysis or on any concern previously analyzed. There is no impact on equipment important to safety. Therefore, there is no increase in the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report.

2) Does the subject of this evaluation create the possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report?

   Potential ALARA concerns are addressed by performing a radiation survey of the reactor vessel head to determine if the water shield is needed. The change does not create the possibility for an accident or malfunction of equipment important to safety of a different type than any evaluated previously in the safety analysis report.

3) Does the subject of this evaluation reduce the margin of safety as defined in the basis for any technical specification?

   This subject is not addressed by plant Tech Specs. The change is not related to plant safety. The change does not reduce the margin of safety as defined in the basis for any technical specification.

Based upon the above, there is no unreviewed safety question.

Approved: 4/1/90

Unreviewed Safety Question Evaluation #90-042

Subject: Extreme Cold Weather Condition Guidelines

Description: Procedures have been prepared providing guidelines and actions to be taken to mitigate the consequences of extreme cold weather conditions and prepare the plant for continued operation.

Safety Evaluation:

1) Does the subject of this evaluation increase the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report?

   Placing the exhaust fans and the AFW area vent fans in Pull-To-Lock (P-T-L) when the outside air temperature $\leq 34°F$, does not increase the probability of occurrence of an accident because the initiating events described in the UFSAR are not affected by the fans being in P-T-L.

   There is sufficient time for the operator to take the fans out of P-T-L, during any DBA, before the maximum time dependent qualified design temperature is reached. Indication is provided in the Control Room if the fans are in P-T-L. While the AFW and ECW fans are in P-T-L, adequate procedure guidance exists to prevent AFW and ECW rooms from exceeding design basis maximum temperatures.

   Placing the AFW and ECW fans in P-T-L will not increase the probability of malfunctions inasmuch as the fans will not cycle ON and OFF as temperature changes. Further, during extreme cold weather and non-accident conditions the fans in the ECW pump and AFW pump cubicles can be left in P-T-L because the heat loads are not sufficient to increase temperatures to the maximum design temperatures.

2) Does the subject of this evaluation create the possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report?

   See discussion under (1). This procedure does not create the possibility for an accident or malfunction of equipment important to safety of a different type than any evaluated previously in the safety analysis report.

Unreviewed Safety Question Evaluation #90-042 (Cont'd)

3) Does the subject of this evaluation reduce the margin of safety as defined in the basis for any technical specification?

Temperatures used in the affected Technical Specification 3.7.12, Table 3.7-3 were based upon equipment qualification worst heat load and/or radiation conditions. These setpoints are conservatively set below the maximum time-dependent design basis temperatures. Therefore, the bases for this Technical Specification are not affected by actions taken during extreme cold weather conditions.

Based upon the above, there is no unreviewed safety question.

Approved: 3/12/90

Unreviewed Safety Question Evaluation #90-043

Subject: Liquid Waste Processing System

Description: This change adds valves to the subject P&ID to reflect the as-built condition.

Safety Evaluation:

1) Does the subject of this evaluation increase the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report?

   No accidents in the subject system are analyzed in the UFSAR. However, ruptures of the Recycle Holdup Tank and Evaporator Concentrated Tank are analyzed in sections 15.7.2 and 15.7.3 of the UFSAR. Addition of these normally closed low point drain valves does not change, degrade, or prevent actions; alter any assumptions or conclusions previously made; or result in any increase in accident doses for any accident. Therefore, this change does not increase the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report.

2) Does the subject of this evaluation create the possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report?

   Addition of these normally closed high point vent valves does not affect the operability and functionability of the system or that of any safety-related system. Should the valves fail, this event would not create the possibility of an accident or malfunction of equipment important to safety of a different type than any previously evaluated in the UFSAR.

3) Does the subject of this evaluation reduce the margin of safety as defined in the basis for any technical specification?

   Sections 3/4.11.1.1 thru 3/4.11.1.4 of the Technical Specifications do not discuss or refer to the use of low point drain valves. Drain valves are not governed by any Technical Specifications. The operational and functional requirements of the system are not changed by addition of these valves. Therefore, this change does not reduce the margin of safety as defined in the basis for any Technical Specification.

Based upon the above, there is no unreviewed safety question.

Approved: 3/02/90

Unreviewed Safety Question Evaluation #90-044

Subject: Control Room Design

Description: The door to the Shift Supervisor's office is to be relocated, and the window enlarged. The fire rating is being deleted for the gypsum board wall separating Fire Area 1, Z034 and Z083.

Safety Evaluation:

1) Does the subject of this evaluation increase the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report?

   The subject of this evaluation does not impact the safe shutdown analysis and does not affect the ability of the plant to achieve or maintain safe shutdown following a fire. The subject of this evaluation does not affect the Fire Hazards Analysis. Therefore, the subject of this evaluation does not increase the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the SAR.

2) Does the subject of this evaluation create the possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report?

   The subject of this evaluation is within the bounds of the Fire Hazards Analysis/Appendix R Analysis. The subject of this evaluation does not alter the conclusions reached in this analysis. Therefore, the subject of this evaluation does not create the possibility of an accident of a different type than previously evaluated in the SAR.

   The subject of this evaluation is within the bounds of the fire hazards analysis/Appendix R analysis. The Appendix R analysis has shown that given a fire in fire area 1, the plant can achieve and maintain safe shutdown. The subject of this change does not alter the conclusions reached in the above analyses. Therefore, the subject of this change does not create the possibility of a different type of malfunction of equipment important to safety than previously evaluated in the SAR.

Unreviewed Safety Question Evaluation #90-044 (Cont'd)

3) Does the subject of this evaluation reduce the margin of safety as defined in the basis for any technical specification?

The fire protection/Appendix R programs are not governed by any Technical Specifications. The basis for Tech. Spec. 3/4.7.7 is not impacted by this change as there is no impact to the boundary of the Control Room Envelope. Therefore, the subject of this evaluation does not reduce the margin of safety as defined in the basis for this Tech. Spec.

Based upon the above, there is no unreviewed safety question.

Approved: 3/29/90

Unreviewed Safety Question Evaluation #.)-045

Subject: Condensate Steam

Description: A normally closed high point vent valve is to be added to the Unit 2 P&ID for Condensate Steam for consistency with other documents.

Safety Evaluation:

1) Does the subject of this evaluation increase the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report?

This change does not increase the probability of occurrence of an accident previously evaluated in the SAR. Adding the vent valve does not change the system design or operation since this manual valve is used during system start-up/fill only.

Because this valve is normally closed and manually operated during start-up/fill only, it does not change the system operation. Padding the high point vent valve to the Unit 2 P&ID for the CD system will not change, degrade, or prevent actions; alter any assumptions or conclusions previously made; or result in any increase in accident doses for any accidents as previously evaluated in the SAR.

Because this change does not affect operability or functionability of the system, adding the normally closed high point vent valve to the Unit 2 P&ID does not impact any equipment Important to Safety (ITS) as defined in the SAR nor does it cause an increase in the probability of an accident or malfunction of ITS equipment previously evaluated in the SAR.

Adding this normally closed vent valve does not affect operability or functionability of the system, is in accordance with the design standards, and does not have any impact on pipe stress or supports. Therefore, this change will not result in any increased consequences or changes in results, assuming a malfunction of ITS equipment, as defined in the design basis for the equipment Important to Safety previously evaluated in the SAR.

Unreviewed Safety Question Evaluation #90-045 (Cont'd)

2) Does the subject of this evaluation create the possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report?

Because adding the normally closed, high point vent valve will not affect the system operation or function or that of any safety-related system, the Safety Analysis Report is not affected by this change. Should the valve or line fail (leak or break), this event would not create a malfunction not previously evaluated in the design basis accident analysis nor does it create the possibility of an accident or malfunction of equipment important to safety of a different type than any previously evaluated in the SAR.

3) Does the subject of this evaluation reduce the margin of safety as defined in the basis for any technical specification?

Per review of Section 3/4.7 of the Plant Technical Specifications, this change does not affect any items or activities as discussed in the Plant Technical Specifications. The system is not governed by any Plant Technical Specification.

Based upon the above, there is no unreviewed safety question.

Approved: 3/12/90

Unreviewed Safety Question Evaluation #90-046

Subject: Essential Cooling Water System

Description: This change corrects a typographical error on the subject system P&ID. Valve EW-0147 should be EW-0145.

Safety Evaluation:

1) Does the subject of this evaluation increase the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report?

   Correction of this typographical error on the P&ID will not change the designed form, fit, or function of the valve as built in the unit. Since the form, fit, and function of the valve will remain unchanged, the subject of this review does not affect any systems, items, or activities described in the safety analysis report other than the tag number.

2) Does the subject of this evaluation create the possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report?

   Correction of this typographical error on the P&ID will not change the designed form, fit, or function of the valve as built in the unit. Since the form, fit, and function of the valve will remain unchanged, the subject of this review does not affect any systems, items, or activities described in the safety analysis report other than the tag number.

3) Does the subject of this evaluation reduce the margin of safety as defined in the basis for any technical specification?

   The only technical specifications applying to the essential cooling water loop valves require that each valve be checked every 31 days for correct positioning. Correction of this typographical error on the P&ID will not affect this specification. Thus, since the subject of this review does not require a change to the technical specifications, there will be no affect on the margin of safety as defined in the technical specifications.

Based upon the above, there is no unreviewed safety question.

Approved: x/xx/90

Unreviewed Safety Question Evaluation #90-047

Subject: Laundry and Dry Cleaning Drains

Description: The laundry and dry cleaning drains are to be rerouted from the Condensate Polishing Regenerative Waste Collection Tank (CPRWCT) to the Laundry and Hot Shower Tank (LHST).

Safety Evaluation:

1) Does the subject of this evaluation increase the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report?

   These drains were originally designed to go to the LHST but were rerouted during construction to avoid interferences. These changes will not affect the functions of the LHST and CPRWCT systems or prevent the systems from operating as originally intended. In addition, the materials will meet original design requirements. Modification of the nonsafety-related, seismic II/I supported Equipment and Floor Drain System does not increase the probability of occurrence or the consequences of an accident previously evaluated in the Safety Analysis Report nor does it increase the probability of occurrence or the consequences of a malfunction of equipment important to safety previously evaluated in the Safety Analysis Report.

2) Does the subject of this evaluation create the possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report?

   Modification of the nonsafety-related, Seismic II/I supported Equipment and Floor Drain System does not create the possibility of an accident of a different type or the possibility of a different type of malfunction of equipment important to safety than previously evaluated in the Safety Analysis Report.

Unreviewed Safety Question Evaluation #90-047 (Cont'd)

3) Does the subject of this evaluation reduce the margin of safety as defined in the basis for any technical specification?

The subject of this evaluation is part of the Equipment and Floor Drain System which is discussed in Section 3/4.11 of the Technical Specification and Section 9.3.3 of the FSAR. The Technical Specification discusses the limits of radiation which can be released to unrestricted areas. The FSAR discusses the collection and ultimate disposal of the liquids collected by the EFDS. This modification does not propose a change to either of these documents or parameters. Therefore, the subject of this evaluation does not reduce the margin of safety as described in the basis of the Technical Specification.

Based upon the above, there is no unreviewed safety question.

Approved: 4/01/90

Unreviewed Safety Question Evaluation #90-048

Subject: Hotwell Sump Pump

Description: This change deletes Item #17 (Hotwell Sump Pump) from UFSAR Table 10.1-1. This table is a summary of important design and performance characteristics of the steam and power conversion system.

Safety Evaluation:

1) Does the subject of this evaluation increase the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report?

   The subject of this evaluation is editorial only. This pump is normally isolated during all modes of plant operation, has no safety function and supports no system component or structure that does have a safety function, it therefore could be deleted without affecting the probability of an occurrence of an accident previously evaluated in the UFSAR. The Hotwell Sump Pump being deleted from the table is not discussed in any test of the UFSAR or SER; therefore, its editorial deletion will not affect any accident discussion previously evaluated in the UFSAR, nor will it affect the consequences of an accident previously evaluated in the UFSAR. The change will not affect (increase or decrease) the probability of a malfunction of equipment important to safety previously evaluated in the UFSAR, nor will it affect the consequences of a malfunction of equipment important to safety previously evaluated in the UFSAR.

2) Does the subject of this evaluation create the possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report?

   This editorial change will not create the possibility of an accident or a different type than any previously evaluated in the UFSAR, nor will it create the possibility of a malfunction of any type or description, to any equipment either safety-related or nonsafety-related whether it is or is not discussed in the UFSAR.

Unreviewed Safety Question Evaluation #90-048 (Cont'd)

3) Does the subject of this evaluation reduce the margin of safety as defined in the basis for any technical specification?

The subject of this evaluation is editorial only. The information being deleted is not used in any Technical Specification and does not provide the basis for any Technical Specification its deletion therefore will not affect any margin of safety as defined in the basis for any Technical Specification.

Based upon the above, there is no unreviewed safety question.

Approved: 4/22/90

Unreviewed Safety Question Evaluation #90-049

Subject: Liquid Waste Processing (WL) System

Description: The Unit 2 P&ID is being revised to indicate the correct valve numbers and valve types.

Safety Evaluation:

1) Does the subject of this evaluation increase the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report?

   Indicating the correct valve numbers and types (from globe to ball) for these drain valves does not affect the system design basis or operation of the plant because these drain valves will be used only when draining of the line is required. Therefore, this change does not increase the probability of occurrence of an accident previously evaluated in the UFSAR.

   Indicating the correct valve numbers and types for these drain valves does not change, degrade, or prevent actions; alter any assumptions or conclusions previously made; or result in any increase in accident doses for any accident. Therefore, this change does not increase the consequences of an accident previously evaluated in the UFSAR.

   This change does not affect operability or functionability of the WL system and does not impact equipment important to safety. Therefore, this change does not increase the probability of occurrence of a malfunction of equipment important to safety previously evaluated in the UFSAR.

   These valves are normally closed drain valves and do not impact any equipment important to safety as defined in the UFSAR nor increase the consequences of a malfunction of equipment important to safety previously evaluated in the UFSAR.

2) Does the subject of this evaluation create the possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report?

   Indicating the correct valve numbers and type of drain valves does not affect the WL system operation or function. Should the valves or line fail (leak or break), this event would not create the possibility of an accident of a different type than any previously evaluated in the UFSAR, nor does it create the possibility of a different type of malfunction of equipment important to safety than previously evaluated in the UFSAR.

Unreviewed Safety Question Evaluation #90-049 (Cont'd)

3) Does the subject of this evaluation reduce the margin of safety as defined in the basis for any technical specification?

Sections 3/4.11.1.1 thru 3/4.11.1.4 of the Technical Specifications do not discuss or refer to use of low point drain valves. Drain valves for the WL System are not governed by any Technical Specifications. Operational and functional requirements of the WL system are not changed by indicating the correct valve numbers and types for these drain valves. Therefore, this change does not reduce the margin of safety as defined in the basis for any Technical Specification.

Based upon the above, there is no unreviewed safety question.

Approved: 4/01/90

Unreviewed Safety Question Evaluation #90-050

Subject: Liquid Waste Processing (WL) System

Description: The P&ID's are being revised to add a low point drain valve (WL-1299) to reflect the as-built condition.

Safety Evaluation:

1) Does the subject of this evaluation increase the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report?

No accidents in the WL system are analyzed in the UFSAR. However, rupture to the Recycle Holdup Tank and Evaporator Concentrates Tank are analyzed in section 15.7.2 and 15.7.3 of the UFSAR. These sections analyze the postulated radioactive releases to atmosphere or ground due to liquid-containing tank failure, respectively. Addition of this normally closed low point drain valve does not affect the system design basis or operation of the plant because this drain valve is normally closed and is manually opened only when draining of the line is required. Therefore, this change does not increase the probability of occurrence of an accident previously evaluated in the UFSAR.

No accidents in the WL system are analyzed in the UFSAR. However, failure of this valve would not result in a radioactive leak of greater magnitude than the radioactive liquid release from the Recycle Holdup Tank or Evaporator Concentrates Tank. Therefore, this change does not increase the consequences of an accident previously evaluated in the UFSAR.

Addition of this normally closed low point drain valve does not affect the system design basis or operation of the plant. This change does not affect operability or functionability of the WL system and does not impact either directly or indirectly any equipment important to safety. Therefore, this change does not increase the probability of occurrence of a malfunction of equipment important to safety previously evaluated in the UFSAR.

This valve is a normally closed drain valve and does not impact any equipment important to safety as defined in the SAR nor does it increase the consequences of a malfunction of equipment important to safety previously evaluated in the UFSAR.

Unreviewed Safety Question Evaluation #90-050 (Cont'd)

2) Does the subject of this evaluation create the possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report?

Adding this normally closed drain valve does not affect system operation or function. Should the valve fail (leak or break), this event would not create the possibility of an accident of a different type than any previously evaluated in the UFSAR, nor does it create the possibility of a different type of malfunction of equipment important to safety than previously evaluated in the UFSAR.

3) Does the subject of this evaluation reduce the margin of safety as defined in the basis for any technical specification?

Sections 3/4.11.1.1 through 3/4.11.1.4 of the Technical Specifications do not discuss or refer to use of low point drain valves. Drain valves for the WL System are not governed by any Technical Specifications. Operational and functional requirements of the WL system are not changed by the addition of this valve. Therefore, this change does not reduce the margin of safety as defined in the basis for any Technical Specification.

Based upon the above, there is no unreviewed safety question.

Approved: 8/23/90

Unreviewed Safety Question Evaluation #90-051

Subject: Liquid Waste Processing (WL) System

Description: This change to the P&ID adds a valve (WL-1274) to reflect the as-built condition.

Safety Evaluation:

1) Does the subject of this evaluation increase the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report?

No accidents in the WL system are analyzed in the UFSAR. However, rupture to the Recycle Holdup Tank and Evaporator Concentrates Tank are analyzed in sections 15.7.2 and 15.7.3 of the UFSAR. These sections analyze the postulated radioactive releases to atmosphere or ground due to liquid-containing tank failure, respectively. Addition of this normally closed high point vent valve does not affect the system design basis or operation of the plant because this vent valve will be used only when venting of the line is required. Therefore, this change does not increase the probability of occurrence of an accident previously evaluated in the UFSAR.

No accidents in the WL system are analyzed in the UFSAR. However, failure of this valve would not result in a radioactive leak of greater magnitude than the radioactive liquid release from the Recycle Holdup Tank or Evaporator Concentrates Tank. Therefore, this change does not increase the consequences of an accident previously evaluated in the UFSAR.

Addition of this valve does not affect the system design basis or operation of the plant. The change does not affect operability or functionality of the WL system and does not impact either directly or indirectly any equipment important to safety. Therefore, this change does not increase the probability of occurrence of a malfunction of equipment important to safety previously evaluated in the UFSAR.

This valve is a normally closed vent valve and does not impact any equipment important to safety as defined in the UFSAR nor does it increase the consequences of a malfunction of equipment important to safety previously evaluated in the UFSAR.

Unreviewed Safety Question Evaluation #90-051 (Cont'd)

2) Does the subject of this evaluation create the possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report?

Adding this normally closed vent valve does not affect system operation or function. Should the valve or line fail (leak or break), this event would not create the possibility of an accident of a different type than any previously evaluated in the UFSAR, nor create the possibility of a different type of malfunction of equipment important to safety than previously evaluated in the UFSAR.

3) Does the subject of this evaluation reduce the margin of safety as defined in the basis for any technical specification?

Sections 3/4.11.1.1 through 3/4.11.1.4 of the Technical Specifications do not discuss or refer to use of high pint vent valves. Vent valves are not governed by any Technical Specifications. Operational and functional requirements of the system are not changed by the addition of this valve. Therefore, this change does not reduce the margin of safety as defined in the basis for any Technical Specification.

Based upon the above, there is no unreviewed safety question.

Approved: 8/23/90

Unreviewed Safety Question Evaluation #90-052

Subject: RHR Pump Flow Indication

Description: This change replaces the RHR pump flow Class 1E indicator with a non-Class 1E indicator.

Safety Evaluation:

1) Does the subject of this evaluation increase the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report?

   The change will not increase the probability of occurrence of an accident previously evaluated in the SAR because class 1E indication is still available via QDPS, and the indicator is a passive device, not an event initiator. Therefore, no different type of accidents are created or possible because of this change. The consequences of an accident previously evaluated in the SAR are not increased by this change because control room indication is still being provided via QDPS.

   Replacement of the Class 1E indicator with a non-1E indicator will not increase the probability of occurrence or consequences of a malfunction of equipment important to safety because the seismic and environmental integrity of the Main Control Panel ZCP001 and 7300 Process Control Cabinets will be maintained.

2) Does the subject of this evaluation create the possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report?

   Replacement of the Class 1E indicator with a non-1E indicator does not create the possibility of an accident of a different type than previously evaluated in the SAR because 1E indication is still available via QDPS and the indicator is a passive device, not an event initiator. Therefore, no different type of accident is created because of this change.

   Replacement of the 1E indicator with a non-1E indicator does not create the possibility of a different type of malfunction for the Main Control Panel and 7300 Process Control Cabinets because the seismic and environmental integrity of the equipment is maintained.

Unreviewed Safety Question Evaluation #90-052 (Cont'd)

3) Does the subject of this evaluation reduce the margin of safety as defined in the basis for any technical specification?

The subject of this evaluation is not discussed in the Technical Specifications. The margin of safety as described in the bases for T.S. 3/4.9.8.1 and 3/4.9.8.2 does not discuss this subject and thus is not affected.

Based upon the above, there is no unreviewed safety question.

Approved: 4/03/90

Unreviewed Safety Question Evaluation #90-053

Subject: Low Head Safety Injection Pump

Description: Pressure breakdown orifice is to be replaced to allow increased minimum recirculation flow to ensure pump miniflow exceeds vendor-recommended minimum.

Safety Evaluation:

1) Does the subject of this evaluation increase the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report?

The orifice is located upstream of the Reactor Coolant Pressure Boundary isolation valves of the Safety Injection System and therefore is not part of the LOCA susceptible piping systems. The orifice is a passive mechanical component and therefore cannot be a contributor to an inadvertent SI actuation. The vendor designator is the only item being removed from the P&ID. This designator is indicated to identify the supplier, W, of the orifice. This designator is not pertinent to the design of the system and has no effect on the Licensing basis.

The probability and consequences of a failure of the miniflow line itself remain unchanged since the design, fabrication and installation of the new spool piece is per ASME requirements. Any abnormal leakage of a particular train of SI can be terminated.

Changing the orifice type to allow increased recirculation flow may decrease the probability of occurrence of a malfunction of the LHSI 1A pump.

The consequences of a malfunction of LHSI Pump 1A or its associated heat exchanger, piping, valves and other components, caused by a conical flow orifice are bounded by the consequences evaluated of a barrel orifice design.

2) Does the subject of this evaluation create the possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report?

Since the orifice is a passive mechanical component and because the changes in design and increase in flowrate are slight and within design criteria, the possibility of a new type of accident has not been created.

Unreviewed Safety Question Evaluation #90-053 (Cont'd)

Since the new orifice is designed and fabricated to the same ASME requirements as the old orifice, the change does not create the possibility of a different type of malfunction of LHSI than any previously evaluated.

3) Does the subject of this evaluation reduce the margin of safety as defined in the basis for any technical specification?

Testing during shutdown following modifications will verify that the flow rate is within the specified band and that, therefore the margin of safety has not been reduced.

Based upon the above, there is no unreviewed safety question.

Approved: 3/12/90

Unreviewed Safety Question Evaluation #90-054

Subject: Undervoltage Relays/ERFDADS

Description: Undervoltage relays are to be installed to inhibit thermal overload alarms in ERFDADS when control power is not available. An undervoltage/loss of control power signal is to be provided for Class 1E MOVs that do not presently have it to allow monitoring at ERFDADS.

Safety Evaluation:

1) Does the subject of this evaluation increase the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report?

   Thermal overload devices are prevented from tripping the breaker for an overload and are used for alarm only. Undervoltage devices being added are also used for alarm only. The change provides monitoring of loss of control power and allows proper distinction between thermal overload and undervoltage alarm conditions. The changes do not increase the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report.

2) Does the subject of this evaluation create the possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report?

   The changes do not affect the function or operability of systems or equipment. No new cables or combustible loads are added - existing spare cables are to be used. Affected safety-related MOVs are being brought to the same thermal overload and undervoltage control standards as for the other safety-related MOVs (except DC MOVs).

3) Does the subject of this evaluation reduce the margin of safety as defined in the basis for any technical specification?

   Operability requirements for systems and/or components included in this modification are discussed in general in the Tech Specs. However, this modification does not affect operability of any components. Margins of safety defined in the Tech Specs are not reduced.

Based upon the above, there is no unreviewed safety question.

Approved: 4/6/90

Unreviewed Safety Question Evaluation #90-055

Subject: LWPS Pump Seal Water System

Description: The P&ID is to be revised to show some valves as globe valves rather than ball valves to reflect the as-built condition.

Safety Evaluation:

1) Does the subject of this evaluation increase the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report?

Changing vent valve (WL-1336) and isolation valves (WL-1617 and WL-1618) from ball-to globe-type does not affect the system design basis or operation of the plant because these valves are normally closed and are manually opened only when venting or isolation of the line is needed. Therefore, these changes do not increase the probability of occurrence of an accident previously evaluated in the UFSAR.

Failure of these normally closed vent and isolation valves would not result in a radioactive leak of greater magnitude than the radioactive liquid that could be released from the Recycle Holdup Tank (RHT) or Evaporator Concentrates Tank (ECT). Therefore, these changes do not increase the consequences of an accident previously evaluated in the UFSAR.

Changing the vent valve and isolation valves from ball- to globe-type does not affect the system design basis or operation of the plant. This change does not affect operability or functionability of the WL system and does not impact either directly or indirectly the probability of occurrence of a malfunction of equipment important to safety previously evaluated in the UFSAR.

These valves are normally closed and do not impact any equipment important to safety as defined in the UFSAR nor do they increase the consequences of a malfunction of equipment important to safety previously evaluated in the UFSAR.

Unreviewed Safety Question Evaluation #90-055 (Cont'd)

2) Does the subject of this evaluation create the possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report?

These changes do not affect the system operation or function. Rupture of the RHT and ECT would envelope the consequences of a failure of these valves. Should the valves fail, this event would not create the possibility of an accident of a different type than any previously evaluated in the UFSAR, or create the possibility of a different type of malfunction of equipment important to safety than previously evaluated in the UFSAR.

3) Does the subject of this evaluation reduce the margin of safety as defined in the basis for any technical specification?

Sections 3/4.11.1.1 through 3/4.11.1.4 of the Technical Specifications do not discuss or refer to the use of vent or isolation valves. Vent and isolation valves are not governed by any Technical Specification. The operational and functional requirements of the WL system are not altered by this change. Therefore, this change does not reduce the margin of safety as defined in the basis for any Technical Specification.

Based upon the above, there is no unreviewed safety question.

Approved: 8/23/90

Unreviewed Safety Question Evaluation #90-056

Subject: Standby Diesel Generator Subsystems

Description: The existing Standby Diesel Generator subsystem P&IDs are being updated and new P&IDS are being provided to reflect the "as-built" configuration.

Safety Evaluation:

1) Does the subject of this evaluation increase the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report?

   The proposed changes do not affect plant procedures, operability, or ability of the subject systems to perform its safety function. The changes reflect the as-installed configuration of the diesel generator subsystems. No valves or components are physically being added to or deleted from the systems. Therefore, the proposed changes to the P&IDs and the UFSAR will not increase the probability of occurrence or the consequences of an accident or malfunction important to safety previously evaluated in the safety analysis report.

2) Does the subject of this evaluation create the possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report?

   See discussion under (1). The changes do not create the possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report.

3) Does the subject of this evaluation reduce the margin of safety as defined in the basis for any technical specification?

   The Bases for Technical Specification (TS) 3/4.8 require operability of the Standby Diesel Generators to ensure that sufficient power will be available to supply the safety-related equipment required for: (1) safe shutdown of the facility, and (2) mitigation and control of accident conditions within the facility. The changes discussed above and the systems of which they are a part have functioned according to design. These changes do not reduce the margin of safety as defined in the bases for the TS.

Based upon the above, there is no unreviewed safety question.

Approved: 5/15/90

Unreviewed Safety Question Evaluation #90-057

Subject: ECW Chiller

Description: This change to the UFSAR adds the evaluation for failure of the ECW chiller check valve in the "open" position to the ECW system failure modes and effects analysis.

Safety Evaluation:

1) Does the subject of this evaluation increase the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report?

   As analyzed, failure of the check valve does not result in an operational or safe shutdown concern since the ECW trains are operable since check valve failure constitutes a single failure. The ECW trains are available following failure of the check valve, so the plant can continue safe operation in or perform a safe shutdown. This failure does not increase the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report.

2) Does the subject of this evaluation create the possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report?

   ECW trains remain available if the failure occurs, so that the plant can continue normal operation or achieve safe shutdown. Therefore, failure of the check valve in the open position does not create the possibility for an accident or malfunction of equipment important to safety of a different type than any evaluated previously in the safety analysis report.

3) Does the subject of this evaluation reduce the margin of safety as defined in the basis for any technical specification?

   Addition of ECW Chiller Supply check valve failure in the open position to the failure modes and effects analysis does not affect the requirements of the technical specifications. As analyzed, failure of the check valve in the open position does not affect the operability of the ECW system. Therefore, none of the limiting conditions for operation in TS 3/4.7.4 are violated.

Based upon the above, there is no unreviewed safety question.

Approved: 4/1/90

Unreviewed Safety Question Evaluation #90-058

Subject: Reactor Coolant Loop Branch Line Breaks

Description: Criterion #3 is to be deleted from UFSAR Section 3.6.2.3.2.3. It is not applicable to STPEGS.

Safety Evaluation:

1) Does the subject of this evaluation increase the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report?

Removal of criterion #3 does not involve a change to the bases, assumptions, or conditions given in the SAR. The safety-related function of the HHSI is unchanged by deletion of criterion #3 because the other criteria are adequate to eliminate break propagation to the HHSI line connected to the affected leg.

Small line break accidents have been previously analyzed in the SAR to demonstrate that the safety-related systems maintain the capability to mitigate the consequences of these accidents. Since no additional break locations are created by the subject change t' are are no additional effects (pipe whip, jet impingement, environment, etc.) on safety-related components or equipment which have not been previously evaluated in the SAR. Since there is no effect on any safety-related equipment or components the consequences of previously evaluated accidents are not increased.

Deletion of RCL branch line break criterion as given in the subject changes does not increase the probability of occurrence of a malfunction of equipment important to safety previously evaluated in the SAR. Prevention of small RCL branch line breaks propagating to the HHSI is still maintained by criteria #'s 1 and 2.

The subject change only removes a RCL branch line break criterion which is not applicable to STPEGS. The design basis of the HHSI system is unchanged. Since the STPEGS design prevents propagation of small branch line breaks to the HHSI lines, the above design basis is very conservative and this design basis is unchanged.

Unreviewed Safety Question Evaluation #90-058 (Cont'd)

2) Does the subject of this evaluation create the possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report?

The subject change does not create the possibility of an accident of a new, different, or previously unanalyzed type. Small line breaks and the subsequent effects have been previously analyzed and incorporated into the STPEGS design basis. No new breaks are created by the removal of criterion #3.

The STPEGS design incorporates adequate features to protect safety-related equipment against postulated rupture of high energy piping and the subsequent pipe rupture effects. No new or additional break locations are generated as a result of the subject change. Consequently, the ability of safety-related equipment to mitigate the effects of a postulated small break accident is unchanged.

3) Does the subject of this evaluation reduce the margin of safety as defined in the basis for any technical specification?

Revision of the RCL branch line break criterion is not the subject of any technical specification nor is it incorporated in the basis for any technical specification. The margin of safety as defined in the Technical Specification Basis is therefore unchanged. Since propagation of small RCL branch line breaks to the HHSI lines is adequately prevented, the margin of safety is maintained.

Based upon the above, there is no unreviewed safety question.

Approved: 5/01/90

Unreviewed Safety Question Evaluation #90-059

Subject: Component Cooling Water System

Description: The "LIP" (Locked in Place) designation was omitted from valve CC0227 on the subject system P&ID. The "LO" (Locked Open) designation was omitted from valve CC0152 on the subject system P&ID.

Safety Evaluation:

1) Does the subject of this evaluation increase the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report?

   This change to the P&ID reflects the plant as-built configuration as well as plant operating procedure. Operability of the valve or the subject system is not affected by the change. There is no increase in the probability of occurrence of the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report.

2) Does the subject of this evaluation create the possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report?

   See (1). The changes do not create the possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report.

3) Does the subject of this evaluation reduce the margin of safety as defined in the basis for any technical specification?

   Showing the correct "LO" or "LIP" symbol on a valve does not affect the operability of the valve or operability of the subject system. Therefore, there is no effect on the margin of safety as defined in the basis for any technical specification

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Based upon the above, there is no unreviewed safety question.

Approved: 4/1/90

Unreviewed Safety Question Evaluation #90-060

Subject: Determination of Radionuclides (Post-Accident)

Description: Procedure OPCP08-AP-0005 is being revised to be compatible with updated plant equipment and updated plant procedures.

Safety Evaluation:

1) Does the subject of this evaluation increase the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report?

   The gamma spectroscopy system provides no safety-related function. No interconnection is made between this system and any installed plant safety-related equipment. No reduction in analysis capability will result from this change. No change in the quality of analysis will result from this change. Since no interconnection to safety-related equipment exists, there is no increase in the probability of occurrence of an accident as described in the SAR. The system is a measurement tool only; therefore, the consequences of any accident are not changed.

   The system provides no control function over permanent plant equipment, nor will absence of this equipment affect permanent plant equipment. Therefore, no malfunction of equipment important to safety will occur.

2) Does the subject of this evaluation create the possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report?

   See discussion under (1). The changes do not create the possibility for an accident or malfunction of equipment important to safety of a different type than any evaluated previously in the safety analysis report.

3) Does the subject of this evaluation reduce the margin of safety as defined in the basis for any technical specification?

   No technical specification changes are necessary. The change of equipment does not change the analysis capability or quality. Therefore, no change in the margin of safety as defined in the basis for any Technical Specification will result.

Based upon the above, there is no unreviewed safety question.

Approved: 4/01/90

Unreviewed Safety Question Evaluation #90-061

Subject: Condenser Air Removal System

Description: A drain line is to be added to the subject system pump suction piping in the turbine-generator building.

Safety Evaluation:

1) Does the subject of this evaluation increase the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report?

   The lines are not safety-related, nor do they attach to any safety-related equipment or perform any safety-related function. There is no change in the intended function or operability of the system as described in the FSAR. Therefore, this change will not increase the probability of occurrence of an accident or the consequences of an accident as previously evaluated in the Safety Analysis Report, nor will it increase the consequences of an accident or increase the probability of occurrence of a malfunction of equipment previously evaluated in the Safety Analysis Report.

2) Does the subject of this evaluation create the possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report?

   See discussion under (1). Therefore, this change will not create the possibility of an accident or the malfunction of equipment important to safety of a different type than evaluated in the Safety Analysis Report.

3) Does the subject of this evaluation reduce the margin of safety as defined in the basis for any technical specification?

   The Condenser Air Removal System is not in the Technical Specification; therefore, the change will not reduce the margin of safety as defined in the basis for any Technical Specifications.

Based upon the above, there is no unreviewed safety question.

Approved: 3/29/90

Unreviewed Safety Question Evaluation #90-062

Subject: Feedwater System

Description: Temporary pressure indicators PI-7500, PI-7501 and PI-7502 are being made permanent. The subject system P&ID is being revised accordingly.

Safety Evaluation:

1) Does the subject of this evaluation increase the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report?

Failure of the feedwater booster pumps will not affect safe shutdown of the plant. The plant can safely shutdown without the feedwater booster pumps and that portion of the feedwater system. The portion of the feedwater system required for shutdown is that portion downstream of the feedwater isolation valves. The probability that the subject of this change would result in loss of main feedwater to the steam generators is no more likely than loss of feedwater from any other component or pipe in the nonsafety-related portion of the feedwater system, since they are all purchased and installed to the same codes and standards (nonsafety-related). Therefore, the subject of this evaluation does not increase the probability of occurrence of an accident previously evaluated in the SAR.

Loss of the feedwater system has already been analyzed in the SAR. The analysis shows that the plant has the capability of safely shutting down following loss of main feedwater. Failure of the subject of this evaluation is bounded by failure of the whole nonsafety-related portion of the feedwater system. Therefore, the subject of this evaluation does not increase the consequences of an accident previously evaluated in the SAR.

The feedwater booster pumps are not important to safety, they do not perform any safety-related function. As a whole, the nonsafety-related portion of the feedwater system can be lost without affecting any equipment important to safety. Therefore, the subject of this evaluation does not increase the probability of occurrence of a malfunction of equipment important to safety previously evaluated in the SAR.

Unreviewed Safety Question Evaluation #90-062 (Cont'd)

The consequences of the loss of the feedwater booster pumps and the feedwater system has already been analyzed in the SAR and found to not impact safe shutdown. Therefore, the subject of this evaluation does not increase the consequences of a malfunction of equipment important to safety previously evaluated in the SAR.

2) Does the subject of this evaluation create the possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report?

The loss of the nonsafety-related portion of the feedwater system has been evaluated in the SAR. The subject of this evaluation is part of the nonsafety-related portion of the feedwater system. Therefore, the subject of this evaluation does not create the possibility of an accident of a different type than any previously evaluated in the SAR.

The feedwater pumps are nonsafety-related. The subject of this evaluation may induce failure of the feedwater booster pumps from failure of the added piping; however, since the feedwater booster pumps are not important to safety, the subject of this evaluation does not create the possibility of a different type of malfunction of equipment important to safety than any previously evaluated in the SAR.

3) Does the subject of this evaluation reduce the margin of safety as defined in the basis for any technical specification?

The technical specifications do not govern the portion of the feedwater system which is the subject of this review. Thus, this change does not affect the margin of safety.

Based upon the above, there is no unreviewed safety question.

Approved: 4/06/90

Unreviewed Safety Question Evaluation #90-063

Subject: Loose Parts Monitoring System

Description: The Loose Parts Monitoring System (LPMS) will be upgraded by replacement of selected system hardware to provide a state of the art signal processing and alarm function.

Safety Evaluation:

1) Does the subject of this evaluation increase the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report?

   This change does not affect the licensing basis of the plant or affect any equipment important to safety. There are no credible failures associated with the change that could impact operating of plant safety-related equipment or components. The new system is functionally equivalent to the original system. The system is a passive system utilized to detect loose parts in the RCS and provides no safety-related functions. The replacement will improve overall system performance and will meet regulatory guidance as given in RG 1.133.

2) Does the subject of this evaluation create the possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report?

   The Loose Parts Monitoring System is a passive system utilized to detect loose parts in the reactor coolant system. There are no failure modes that could impact accident analyses, and no new types of accident or malfunctions are created by this change. The original design basis is unchanged.

3) Does the subject of this evaluation reduce the margin of safety as defined in the basis for any technical specification?

   The original design basis of the system remains unchanged. The new system fully complies with RG 1.133 guidance. There is no effect on the margin of safety as defined in the basis for any technical specification.

Based upon the above, there is no unreviewed safety question.

Approved: 6/26/90

Unreviewed Safety Question Evaluation #90-064

Subject: Dropped Rod Analysis

Description: The UFSAR is to be revised to change the description of the dropped rod analyses methodology for Unit 1 Cycle 3 and Unit 2 Cycle 2.

Safety Evaluation:

1) Does the subject of this evaluation increase the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report?

   The proposed change does not involve a physical change to the plant or a change in procedures which are used in operating the plant. Therefore, there is no increase in the probability of an accident or malfunction of equipment important to safety previously analyzed in the SAR.

   In addition, the proposed change in the analysis does not change the analytical acceptance limits for this accident. Since the acceptance limit is that DNB (fuel failure) will not occur, the dose consequences are not changed.

2) Does the subject of this evaluation create the possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report?

   No physical or procedural changes to the plant are involved. The analysis is for the Dropped Rod accident only, which has been previously analyzed in the SAR. The proposed change in the analysis does not change the acceptance limit for this accident. Since the acceptance limit is not changed, the proposed change will not create the possibility of a different type of accident or malfunction of equipment important to safety than previously analyzed in the SAR.

3) Does the subject of this evaluation reduce the margin of safety as defined in the basis for any technical specification?

   This does not involve a physical change to the plant or a change in procedures used in operating the plant. The new Dropped Rod analysis is essentially the same as the existing analysis. The acceptance limit is not changed.

Based upon the above, there is no unreviewed safety question.

Approved: 4/22/90

Unreviewed Safety Question Evaluation #90-065

Subject: Control of Heavy Loads

Description: This change provides safe load paths to allow gates in the Spent Fuel Pool to be taken to areas away from the Spent Fuel Pool for easier maintenance.

Safety Evaluation:

1) Does the subject of this evaluation increase the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report?

   The Spent Fuel Pool (SFP) gates are still to be moved using the single-failure-proof 15-ton hoist. Safe load paths in the immediate vicinity of the SFP are unchanged. The new paths for the gates either follow paths already approved for heavier components, or do not pass over equipment important-to-safety. Therefore, there is no increase in the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report.

2) Does the subject of this evaluation create the possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report?

   The new safe load paths do not create the possibility for an accident or malfunction of a different type because a load drop from the single-failure-proof 15-ton hoist is not postulated to occur.

3) Does the subject of this evaluation reduce the margin of safety as defined in the basis for any technical specification?

   Since the 15-ton hoist is single-failure-proof, and the load paths are not changed in the vicinity of the Spent Fuel Pool, there is no reduction in the margin of safety as defined in the basis for TS 3/4.9.7 which addresses Crane Travel in the Fuel Handling Building.

Based upon the above, there is no unreviewed safety question.

Approved: 4/23/90

Unreviewed Safety Question Evaluation #90-066

Subject: Valve Locking Device

Description: Valve locking devices are to be installed on fifteen valves in the Spent Fuel Pool Cooling and Cleanup System to provide stricter control of potential Spent Fuel Pool drain paths and prevent inadvertent draining of the Spent Fuel Pool.

Safety Evaluation:

1) Does the subject of this evaluation increase the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report?

   Addition of a locking device to the subject valves will not affect the system design basis or operation of the plant because the valves are normally closed and the valves' functions are not being changed. Therefore, this change does not increase the probability of occurrence of the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report.

2) Does the subject of this evaluation create the possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report?

   The locking devices are intended for added protection against inadvertent operation. The addition does not affect the operability of functioning of any safety-related system. Failure of such a device would not create the possibility for an accident or malfunction of equipment important to safety of a different type than any evaluated previously in the safety analysis report.

3) Does the subject of this evaluation reduce the margin of safety as defined in the basis for any technical specification?

   Section 3/4.9.11 of the Technical Specifications does not discuss or refer to use of locking devices on valves. Valve locking devices are not governed by Tech Spec requirements and operational/functional requirements of the subject system are not altered by this change. Therefore, the change does not reduce the margin of safety as defined in the basis for any Technical Specification.

Based upon the above, there is no unreviewed safety question.

Approved: 6/6/90

Unreviewed Safety Question Evaluation #90-067

Subject: Installation of Flushing Flanges (Unit 2)

Description: Flushing flanges are to be installed in the Open Loop Auxiliary Cooling (OC) System in place of blind flanges to route the Unit 1 waterbox water and the MAB/RCB chiller discharge to the Unit 2 OC system. See USQE #90-069.

Safety Evaluation:

1) Does the subject of this evaluation increase the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report?

   The affected systems perform no safety-related functions. Failure of these systems does not prevent safe shutdown of the reactor or affect any safety analyses performed. Flange failure or hose rupture inside the Turbine Generator Building does not increase the probability of occurrence of a malfunction of equipment important to safety. There are no passageways, pipe chases, or cableways from the TGB to areas containing safety-related equipment that are below plant design flood level or are not flood proof. This change does not increase the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report.

2) Does the subject of this evaluation create the possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report?

   The subject systems perform no safety functions. Therefore, loss of either or both systems does not prevent safe shutdown of the reactor. The change does not create the possibility for an accident or malfunction of equipment important to safety of a different type than any evaluated previously in the safety analysis report.

3) Does the subject of this evaluation reduce the margin of safety as defined in the basis for any technical specification?

   The subject systems are not governed by any Tech Spec. The changes do not reduce the margin of safety as defined in the basis for any technical specification.

Based upon the above, there is no unreviewed safety question.

Approved: 4/18/90

Unreviewed Safety Question Evaluation #90-068

Subject: Mechanical Auxiliary Building (MAB) HVAC

Description: This change connects a temporary duct to the MAB main duct to direct temporary cooling into the Locker Room and Health Physics/Radiologically Restricted Areas at the 41-foot elevation.

Safety Evaluation:

1) Does the subject of this evaluation increase the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report?

Installation of this Temporary Modification will not increase the probability of occurrence of an accident as previously evaluated in the SAR. Both the MAB Main Supply system and the Locker Room and HP/RRA access areas are nonsafety-related. Therefore, installation of this Temp Mod will not affect operation or performance of safety-related equipment as evaluated in the SAR. Redistributing the supply air on the 41' elevation will not affect the cooling requirements for any safety-related equipment. Supply airflow to the other elevations of the MAB will not be affected as the total airflow to the 41' elevation will be unchanged. The direction of non-ducted airflows will not be affected by this Temp Mod.

Installation of this Temporary Modification will not increase the consequences of an accident previously evaluated in the SAR. The effect of this Temporary Modification is limited to the redirection of cooling air from the MAB Main Supply system to the MAB Locker Room. Neither the MAB Main Supply system or the Locker Room HP/RRA access areas are evaluated in the SAR as contributors to the consequences of an accident. The MAB will not be affected since the change to the supply air is only to the distribution on the 41' elevation and not supply air quantity. Also, there are no changes being made to the exhaust system by this Temporary Modification.

Installation of this Temporary Modification will not increase the probability of a malfunction of equipment important to safety previously evaluated in the SAR. Installation of this Temporary Modification does not affect any other systems or components that could effect or increase the probability of occurrence of malfunction of safety-related equipment.

Unreviewed Safety Question Evaluation #90-068 (Cont'd)

Installation of this Temporary Modification will not increase the consequences of a malfunction of equipment important to safety previously evaluated in the SAR. No safety-related equipment or systems are affected by this Temporary Modification.

2) Does the subject of this evaluation create the possibility of an accident or malfunction of a different type than any evaluated previously in the safety analysis report?

Installation of this Temporary Modification will not create the possibility of an accident of a different type or a different type of malfunction of equipment important to safety than any previously evaluated in the SAR.

The effect of this Temporary Modification is limited to redirection of cooling air from the MAB Main Supply system to the MAB Locker Room. The MAB Main Supply System is a nonsafety-related system serving the nonsafety-related components and areas of the MAB. Redistribution of the supply air on the 41' elevation will not affect the cooling requirements for any safety-related equipment. No safety-related equipment or systems are affected by this Temporary Modification.

3) Does the subject of this evaluation reduce the margin of safety as defined in the basis for any technical specification?

The MAB Main Supply System is a nonsafety-related system serving the nonsafety-related components and areas of the MAB and is not addressed by the Plant Technical Specifications. No Plant Technical Specifications or Technical Specification related systems or components are affected by this Temporary Modification. Installation of this Temporary Modification will not reduce the margin of safety as defined in the basis for any Technical Specification.

Based upon the above, there is no unreviewed safety question.

Approved: 5/3/90

Unreviewed Safety Question Evaluation #90-069

Subject: Installation of Flushing Flanges (Unit 1)

Description: Flushing flanges are to be installed in the Open Loop Auxiliary Cooling (OC) System in place of blind flanges to route the Unit 1 waterbox water and the MAB/RCB chiller discharge to the Unit 2 OC system. Blind flanges are to be installed in the OC system, and a flushing flange with hose installed at the Circulating Water Intake Structure. The hose is routed to the Auxiliary Bay for discharge back to the reservoir. See USQE #90-067.

Safety Evaluation:

1) Does the subject of this evaluation increase the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report?

   The affected systems perform no safety-related functions. Failure of these systems does not prevent safe shutdown of the reactor or affect any safety analyses performed. Flange failure inside the Turbine Generator Building does not increase the probability of occurrence of a malfunction of equipment important to safety. There are no passageways, pipe chases, or cableways from the TGB to areas containing safety-related equipment that are below plant design flood level or are not flood proof. This change does not increase the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report.

2) Does the subject of this evaluation create the possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report?

   The subject system performs no safety functions. Therefore, loss of the system does not prevent safe shutdown of the reactor. The change does not create the possibility for an accident or malfunction of equipment important to safety of a different type than any evaluated previously in the safety analysis report.

Unreviewed Safety Question Evaluation #90-069 (Cont'd)

3) Does the subject of this evaluation reduce the margin of safety as defined in the basis for any technical specification?

The subject system is not governed by any Tech Spec. The changes do not reduce the margin of safety as defined in the basis for any technical specification.

Based upon the above, there is no unreviewed safety question.

Approved: 4/18/90

Unreviewed Safety Question Evaluation #90-070

Subject: Radioactive Vent and Drain System

Description: The subject system P&ID is being revised to add a line number downstream of valve ED8367 to agree with the as-built condition.

Safety Evaluation:

1) Does the subject of this evaluation increase the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report?

   Adding a line number does not affect the system design basis or operation of the plant because the function of the system has not changed. Therefore, this change does not increase the possibility of occurrence or consequences of an accident previously evaluated in the UFSAR.

   This change does not affect operability or functionability of the ED system and does not impact equipment important to safety. Therefore, this change does not increase the probability of occurrence of a malfunction of equipment important to safety previously evaluated in the UFSAR.

   This change does not impact any equipment important to safety as defined in the UFSAR nor does it increase the consequences a malfunction of equipment important to safety previously evaluated in the UFSAR.

2) Does the subject of this evaluation create the possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report?

   This change does not affect the operability and functionability of the system or that of any safety-related system. Identifying the line number on the P&ID would not create the possibility of a different type of accident or malfunction of equipment important to safety than previously evaluated in the UFSAR.

Unreviewed Safety Question Evaluation #90-070 (Cont'd)

3) Does the subject of this evaluation reduce the margin of safety as defined in the basis for any technical specification?

Technical Specifications 3/4.6, 3/4.7, and 3/4.11 do not discuss or refer to adding line numbers to P&ID's for the subject system. The operational and functional requirements of the subject system are not changed by identifying the line number on the P&ID. Therefore, this change does not reduce the margin of safety as defined in the basis for any Technical Specification.

Based upon the above, there is no unreviewed safety question.

Approved: 3/26/90

Unreviewed Safety Question Evaluation #90-071

Subject: Fire Area Combustible Loading

Description: The FHAR is to be revised to show 12,300 pounds of cable and a combustible load of 1 x 10^5 BTU/ft^2 in Fire Area 3, Fire Zone 5.

Safety Evaluation:

1) Does the subject of this evaluation increase the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report?

   Because the fire protection equipment within the zone can adequately detect and suppress a fire involving the increased combustible load proposed, and because the Appendix R Analysis and the FHAR have already assumed the complete loss of equipment components and circuitry in 03Z045 due to a fire there, the proposed change does not increase the probability or the consequences of an accident or of a malfunction of equipment important to safety previously analyzed in the safety analysis report.

2) Does the subject of this evaluation create the possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report?

   The conclusion of the original FHAR analysis that safe shut-down could be achieved if all the equipment, components, and circuitry in 03Z045 were lost due to a fire, is not affected by the proposed increase in combustible loading of 03Z045. The proposed change does not create the possibility of an accident or of a malfunction of equipment important to safety that has not been previously analyzed in the safety analysis report.

3) Does the subject of this evaluation reduce the margin of safety as defined in the basis for any technical specification?

   The STPEGS Technical Specifications do not discuss the equipment within 03Z045 and do not discuss the Fire Protection System, the Fire Protection Program, or the Appendix R Program. As there is no safety-related equipment in 03Z045 and the zone is not discussed in Tech. Specs. the margin of safety as defined in the Tech. Specs. is not reduced by the proposed change.

Based upon the above, there is no unreviewed safety question.

Approved: 4/22/90

Unreviewed Safety Question Evaluation #90-072

Subject: Residual Heat Removal System

Description: To preclude a boron dilution event, the UFSAR and design documents are to be revised to add a requirement to lock closed RHR standpipe valves during Modes 4, 5 and 6.

Safety Evaluation:

1) Does the subject of this evaluation increase the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report?

   Adding the locking requirement ensures that the valve will remain in the safe position. Thus the probability of occurrence of the boron dilution accident is not increased.

   There are no radiological consequences. This change is only to the RHR standpipe valves and does not affect any other equipment or systems. Thus the consequences of accidents evaluated in the SAR do not increase.

2) Does the subject of this evaluation create the possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report?

   Addition of the locking requirement for the RHR standpipe valves does not affect any other equipment or systems. It does not affect the safety-related function of the RHR system. Thus it does not create the possibility of an accident or malfunction of a different type than evaluated in the SAR.

3) Does the subject of this evaluation reduce the margin of safety as defined in the basis for any technical specification?

   The standpipe valves are not discussed in the basis for any Technical Specification. There is no change to the Technical Specification operability requirements due to this item. There is no change to the statements in the Technical Specification bases which discuss the boron dilution accident. Thus, there is no reduction to the margin of safety as defined in the bases for the Technical Specifications.

Based upon the above, there is no unreviewed safety question.

Approved: 8/23/90

Unreviewed Safety Question Evaluation #90-073

Subject: ESF Load Sequencer Remote Alarm Annunciation

Description: ERFDADS computer points which indicate sequencer malfunction/trouble are to be combined to drive one annunciator per ESF load sequencer.

Safety Evaluation:

1) Does the subject of this evaluation increase the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report?

   This change does not affect the probability of occurrence of an accident because providing a Main Control Room annunciator for ESF Load Sequencer trouble alarm only enhances system availability as well as maintainability of ESF Load Sequencer equipment. There is no impact to the existing safety analyses. Those analyses assume proper operation of the sequencers and the sequencer operation is not affected by this change.

   This change does not increase the consequences of an accident as evaluated in the Safety Analysis Report since this change enhances operator knowledge of sequencer status in the event their operation is required.

   This change does not increase the probability of occurrence or the consequences of a malfunction of equipment as evaluated in the Safety Analysis Report since this change enhances operator knowledge of a sequencer malfunction. In the event sequencer operation is required, the additional knowledge of the sequencer status would aid operators in providing timely necessary response.

2) Does the subject of this evaluation create the possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report?

   This change does not create the possibility of an accident of a different type as evaluated in the Safety Analysis Report since this change does not alter operation of the ESF Load Sequencers. This change only affects CR annunciator responses when the ESF Load Sequencer window is lit.

   This change does not create the possibility of a different type of malfunction of equipment as evaluated in the Safety Analysis Report since this change enhances operator knowledge of a sequencer malfunction and does not alter the operability of the sequencers.

Unreviewed Safety Question Evaluation #90-073 (Cont'd)

3) Does the subject of this evaluation reduce the margin of safety as defined in the basis for any technical specification?

This change does not reduce the margin for safety as defined in the basis for the Technical Specifications since this change enhances operator knowledge of sequencer problems, over and above the operability surveillances required by the plant Technical Specifications.

Based upon the above, there is no unreviewed safety question.

Approved: 7/06/90

Unreviewed Safety Question Evaluation #90-074

Subject: Instrument Air Compressor

Description: This temporary modification allows use of service water as the cooling water supply to the instrument air compressor and aftercooler via the Closed Loop Auxiliary Cooling Water System (AC) piping during the upcoming Open Loop Auxiliary Cooling System outage.

Safety Evaluation:

1) Does the subject of this evaluation increase the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report?

   Accidents involving the affected systems (AC, Service Water, Instrument Air) are not addressed in FSAR Chapter 15. The systems perform no safety function, so that failure of the systems would not prevent safe shutdown of the reactor. Flooding due to broken lines is enveloped by previous analyses. Therefore, there is no increase in the probability of occurrence or the consequences of an accident or malfunction of equipment important-to-safety previously evaluated in the safety analysis report.

2) Does the subject of this evaluation create the possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report?

   The AC and Service Water systems are not evaluated in accident analyses. This temporary modification does not create the possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report.

3) Does the subject of this evaluation reduce the margin of safety as defined in the basis for any technical specification?

   The AC and Service Water systems are not included or required in any Technical Specification, nor or they referenced in Tech. Spec. bases. Unavailability of the AC system or use of the Service Water System will not reduce the margin of safety.

Based upon the above, there is no unreviewed safety question.

Approved: 4/20/90

Unreviewed Safety Question Evaluation #90-076

Subject: BPRA Handling Tool

Description: The Unit 1 BPRA Handling Tool is inoperable and a temporary location for troubleshooting is needed in the Spent Fuel Pool. The tool will be supported by a sling or chain secured to a handrail support stanchion.

Safety Evaluation:

1) Does the subject of this evaluation increase the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report?

   In the event the temporary support fails, the tool or support cannot impact fuel in the spent fuel pool. Fuel racks adjacent to the location of the BPRA tool are unused for the life of this temporary modification. Impact on an assembly in transit would be bounded by existing accident analyses. Consequences of a leak in the Spent Fuel Cooling and Cleanup System have been evaluated in UFSAR Section 9.3.3.3.2. The temporary support will not interfere with fuel handling operations or travel of the fuel handling machine in the Spent Fuel Pool.

2) Does the subject of this evaluation create the possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report?

   The BPRA tool is a nonsafety-related tool. The temporary support will not affect fuel handling operations or travel of the Fuel Handling Machine. Therefore, failure of the tool or support does not create the possibility for an accident or malfunction of equipment important to safety of a different type than any evaluated previously in the safety analysis report.

3) Does the subject of this evaluation reduce the margin of safety as defined in the basis for any technical specification?

   The temporary support will not affect the ability to maintain Keff $\leq$ 0.95 as required per TS 5.6. The tool will not be suspended over spent fuel racks, and will not affect the ability to add borated water to the Spent Fuel Pool. Therefore, the change does not reduce the margin of safety as defined on the basis for any technical specification.

Based upon the above, there is no unreviewed safety question.

Approved: 4/17/90

Unreviewed Safety Question Evaluation #90-078

Subject: Liquid Waste Processing (WL) System

Description: The P&ID is to be revised to show valves WL-1313 and WL-1314 as "locked open". This will reflect the as-built condition.

Safety Evaluation:

1) Does the subject of this evaluation increase the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report?

   Changing to locked open from normally open valves does not affect the system design basis or operation of the plant. Therefore, this change does not increase the probability of occurrence of an accident previously evaluated in the UFSAR.

   The change does not change, degrade, or prevent actions; alter any assumptions or conclusions previously made; or result in any increase in accident doses for any accident. Therefore, this change does not increase the consequences of an accident previously evaluated in the UFSAR.

   This change does not affect the operability or functionability of the WL system and does not impact either directly or indirectly any important to safety equipment. Therefore, this change does not increase the probability of occurrence of a malfunction of equipment important to safety previously evaluated in the UFSAR, nor does it increase the consequences of a malfunction of equipment important to safety previously evaluated in the UFSAR.

2) Does the subject of this evaluation create the possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report?

   Changing these valves from normally open to locked open does not affect the operability and functionability of the WL system or that of any safety-related system. Should the valve fail, this event would not create the possibility of a different type of accident or malfunction of equipment important to safety than previously evaluated in the UFSAR.

Unreviewed Safety Question Evaluation #90-078 (Cont'd)

3) Does the subject of this evaluation reduce the margin of safety as defined in the basis for any technical specification?

Sections 3/4.11.1.1 through 3/4.11.1.4 of the Technical Specifications do not discuss or refer to the locked open function of these valves The operational and functional requirements of the system are not changed by changing these valves from normally open to locked open. Therefore, this change does not reduce the margin of safety as defined in the basis for any Technical Specification.

Based upon the above, there is no unreviewed safety question.

Approved: 5/01/90

Unreviewed Safety Question Evaluation #90-079

Subject: Fire Protection System

Description: The P&ID for the Mechanical/Electrical Auxiliary Building fire protection system is to be revised to correctly show valve FP-0738 as a gate valve rather than a check valve.

Safety Evaluation:

1) Does the subject of this evaluation increase the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report?

   The subject of this change is a nonsafety-related system. The change to the P&ID will not affect the operation of the Fire Protection System. The subject of this evaluation does not affect any analysis in the FSAR. Therefore, the subject of this evaluation does not increase the probability of occurrence of an accident previously evaluated in the FSAR.

   The valve is on a local pressure indicator used for information only. Therefore, the subject of this evaluation does not increase the consequences of an accident previously evaluated in the FSAR. The Fire Protection Systems are not safety-related nor are the components of the system. Further, the subject of this change does not affect the operation of the Fire Protection System. Therefore, the subject of this evaluation does not increase the probability of occurrence or consequences of a malfunction of equipment important to safety previously evaluated in the FSAR.

2) Does the subject of this evaluation create the possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report?

   The subject of this evaluation does not affect the operation of the Fire Protection System. The subject of this evaluation does not affect any accident analysis in the FSAR. Therefore, the subject of this evaluation does not create the possibility of an accident of a different type than any previously evaluated in the FSAR, or create the possibility of a different type of malfunction of equipment important to safety than any previously evaluated in the FSAR.

Unreviewed Safety Question Evaluation #90-079 (Cont'd)

3) Does the subject of this evaluation reduce the margin of safety as defined in the basis for any technical specification?

The Fire Protection Systems are not covered by any Technical Specification.

Based upon the above, there is no unreviewed safety question.

Approved: 5/01/90

Unreviewed Safety Question Evaluation #90-080

Subject: Startup Boron Requirements

Description: This evaluation addresses the boron requirement for core on-load and subsequent entry into Mode 6 for Unit 1, cycle 3.

Safety Evaluation:

1) Does the subject of this evaluation increase the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report?

   The change does not involve operator actions or plant modifications. The design value is less than the 2500ppm assumed in the SAR of the boron dilution accident. Since the refueling operation will be done with a minimum of 2500ppm boron, there is no effect on the SAR results.

   The actual design startup boron requirement does not impact the applicable accident and, therefore, does not increase the probability of occurrence of an accident previously evaluated in the SAR, does not increase the consequences of an accident previously evaluated in the SAR, does not increase the probability of occurrence of a malfunction of equipment important to safety previously evaluated in the SAR, and does not increase the consequences of a malfunction of equipment important to safety previously evaluated in the SAR.

2) Does the subject of this evaluation create the possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report?

   The actual design startup boron requirement for a k-eff of less than or equal to 0.95 is less than the minimum boron concentration which will be allowed to be present during refueling. Therefore, it does not create the possibility of an accident of a different type than any previously evaluated in the SAR.

Unreviewed Safety Question Evaluation #90-080 (Cont'd)

The actual design startup boron requirement is below the Tech. Spec. minimum refueling boron concentration of 2500ppm. This value is within the range of boron concentrations experienced by the RCS and the refueling canal, and it does not creace a possibility of a different type of malfunction of equipment important to safety than any previously evaluated in the SAR.

3) Does the subject of this evaluation reduce the margin of safety as defined in the basis for any technical specification?

The actual design startup boron requirement for a k-eff of less than or equal to 0.95 is less than the minimum boron concentration to be present during refueling. The Technical Specification minimum limit for refueling is used as the input to the boron dilution accident (see basis for Tech. Spec. 3/4.9.1). This minimum will be maintained during refueling operations. Therefore, there is no reduction in the margin of safety, as defined in the basis for any Technical Specifications.

Based upon the above, there is no unreviewed safety question.

Approved: 4/22/90

Unreviewed Safety Question Evaluation #90-081

Subject: Chemical Volume and Control System (CVCS)

Description: Subject system P&ID's are to incorporate a note requiring closure of valves FCV-0110B and FCV-0111B during Modes 5B and 6. Note 9 of the subject P&IDs is to be revised to allow isolation of valves FCV-0110B and FCV-0111B by removal of instrument air or electrical power.

Safety Evaluation:

1) Does the subject of this evaluation increase the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report?

The SAR states that valves FCV-0110B, FCV-0111B, in the CVCS will be locked closed or isolated by removal of instrument air or electrical power during refueling operations to block the flow paths which could allow unborated water to reach the RCS. The subject change to the CVCS P&ID implements this requirement for valves FCV-0110B and FCV-0111B. Since the subject change only incorporates SAR requirements, there is no increase in the probability of occurrence of previously evaluated accidents.

The consequences of a boron dilution event during refueling operations are unchanged since the accident is prevented by administrative controls applied during Modes 5B and 6. The subject change ensures that these administrative controls are referenced on the P&ID.

The subject change incorporates administrative controls in the P&ID which ensures that a malfunction of valves FCV-0110B and FCV-0111B during refueling which could result in a boron dilution event is not possible. These valves are required to be closed in Mode 6 by TS 3/4.9.1 and Mode 5 by TS 3.4.1.4.2. The subject change includes these administrative requirements into the P&IDs.

Since closure of valves FCV-0110B and FCV-0111B is required during Modes 5B and 6, there is no possibility of malfunction and subsequently no increase in the consequences of a malfunction.

Unreviewed Safety Question Evaluation #90-081 (Cont'd)

2) Does the subject of this evaluation creats the possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report?

The subject of this evaluation only incorporates administrative controls which have been previously evaluated in the SAR and incorporated in the STPEGS Technical Specifications. The possibility of a new or different type of accident is not created.

Closure of these valves during Modes 5B and 6 does not create the possibility of a different type of malfunction of equipment important to safety. Closure of these valves is required to prevent a boron dilution event. Upon leaving Mode 5B, the subject valves would be returned to their original condition.

3) Does the subject of this evaluation reduce the margin of safety as defined in the basis for any technical specification?

The Bases 3/4.9.1, Boron concentration, states that: "The locking closed of the required valves during refueling operations precludes the possibility of uncontrolled boron dilution of the filled portion of the RCS. This action prevents flow to the RCS of unborated water by closing flow paths from sources of unborated water." The subject change to the CVCS P&ID complies with this basis by incorporating a notation that the subject valves are to be closed during Modes 5B and 6. The margin of safety is therefore unchanged.

Based upon the above, there is no unreviewed safety question.

Approved: 5/30/90

Unreviewed Safety Question Evaluation #90-082

Subject: Main Cooling Reservoir (MCR) Embankment - Toe Ditch

Description: Embankment drawing is to be revised to note that: "Reference to toe ditch elevations are original toe ditch invert elevations. Actual elevations may be above original due to partial filling of ditches to prevent excess seepage into ditches. This will allow for changes in ditch invent elevations which will enhance seepage control and inspection efforts.

Safety Evaluation:

1) Does the subject of this evaluation increase the probability of occurrence or tne consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report?

   The change does not affect the integrity of the MCR embankment. Maximum flooding conditions based on failure of the MCR embankment is not affected by the proposed changes to ditch invent elevations since no modifications are adjacent to the power block. Therefore, there is no increase in the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report.

2) Does the subject of this evaluation create the possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report?

   Embankment stability and underseepage erosion are addressed in the SAR. The change will have no effect on the integrity of the MCR embankment.

3) Does the subject of this evaluation reduce the margin of safety as defined in the basis for any technical specification?

   The Main Cooling Reservoir is not addressed by Tech Specs. There is no reduction in the margin of safety.

Based upon the above, there is no unreviewed safety question.

Approved: 5/30/90

Unreviewed Safety Question Evaluation #90-083

Subject: Standby Diesel Generator

Description: The existing P&ID's for the standby diesel generator subsystem are being updated, and new P&IDs are being provided to reflect the as-built configuration of the diesels.

Safety Evaluation:

1) Does the subject of this evaluation increase the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report?

   The changes to the SBDG subsystems as identified on the P&IDs and corrections to the UFSAR have been reviewed and do not affect plant procedures, or operability or the ability of the SBDG to perform its safety function. The changes to the P&IDs reflect the as-installed configuration of the STP Diesel Generators' subsystems. No valves or components are physically being added to or deleted from the systems. Therefore, the proposed changes will not increase the probability of occurrence or the consequences of an accident of malfunction of equipment important to safety previously evaluated in the Safety Analysis Report.

2) Does the subject of this evaluation create the possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report?

   See (1). Therefore, the changes do not create the possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report.

3) Does the subject of this evaluation reduce the margin of safety as defined in the basis for any technical specification?

   The Bases for Technical Specification (TS) 3/4.8 require operability of the Standby Diesel Generators to ensure that sufficient power will be available to supply the safety-related equipment required for: (1) safe shutdown of the facility, and (2) mitigation and control of accident conditions within the facility. The changes discussed above and the systems of which they are a part have functioned according to design. These changes do not reduce the margin of safety as defined in the bases of the TS.

Based upon the above, there is no unreviewed safety question.

Approved: 5/5/90

Unreviewed Safety Question Evaluation #90-084

Subject: Fuel Grid Tears

Description: Three fuel assemblies were found with small tears in their grids after the Unit 1 Cycle 2 core unload. However, the assemblies will be used-as-is.

Safety Evaluation:

1) Does the subject of this evaluation increase the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report?

   The design function of the gridstraps are unchanged from UFSAR Section 4.2. The geometry of the grid is unchanged in each case, and the damaged grids still retain enough support to position the fuel rods, prevent vibration and fretting wear. The fuel vendor evaluation of this grid damage is that the assemblies intended for reinsertion are not damaged enough to prevent using them. The existing analyses are both valid and bounding.

2) Does the subject of this evaluation create the possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report?

   Failure of fuel pins is an analyzed event, both in normal and abnormal operations. The fuel vendor and STP experience is that grid damage of this nature (e.g., minor tears) do not cause either a loss of fuel support or failure of fuel pins.

3) Does the subject of this evaluation reduce the margin of safety as defined in the basis for any technical specification?

   Grid tears have no impact on any Technical Specification limits relating to core components. The potential accident impact is bounded by UFSAR assumptions. There is no impact on the margin of safety.

Based upon the above, there is no unreviewed safety question.

Approved: 4/23/90

Unreviewed Safety Question Evaluation #90-085

Subject: Addition of Carpet and Furniture in Room 230

Description: Carpet and furniture is to be added to Room 230. The carpet is to act as a sound-absorbing material. (Room 230 is used for shift briefings).

Safety Evaluation:

1) Does the subject of this evaluation increase the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report?

   These changes have no impact on the fire protection/Appendix R program other than those changes noted in the design change. Combined with decreases in combustible loads elsewhere in the Fire area, these changes do not result in a net increase in combustible loads. Therefore, there is no increase in the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report.

2) Does the subject of this evaluation create the possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report?

   There are no safety-related components or systems that can be affected. Therefore, this change does not create the possibility for an accident or malfunction of equipment important to safety of a different type than any evaluated previously in the safety analysis report.

3) Does the subject of this evaluation reduce the margin of safety as defined in the basis for any technical specification?

   The subject of this change is not covered by Tech Specs. There is no reduction in the margin of safety as defined in the basis for any technical specification.

Based upon the above, there is no unreviewed safety question.

Approved: 5/15/90

Unreviewed Safety Question Evaluation #90-087

Subject: RCS Primary Coolant Loop

Description: The subject P&ID is to be revised to show normally open reactor vessel head vent valve 1"RC-0070 as L.O. (Locked Open) and a note to reflect," valve to be locked open during Modes 1, 2, 3 & 4." The same note is to be added to valve 2"RC-0203. The changes are because Tech Specs require verification that the manual isolation valves in each vent path are locked in the open position for Modes 1, 2, 3 & 4.

Safety Evaluation:

1) Does the subject of this evaluation increase the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report?

   The subject change is editorial and reflects the Tech Spec requirement. The change does not alter the design venting capability or operation of the system. Function of equipment/components important to safety previously evaluated in the SAR is not affected. Therefore, there is no increase in the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report.

2) Does the subject of this evaluation create the possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report?

   There is no change in the head vent system and thus no change in accident scenarios. The system design description is to be made consistent with Tech Spec requirements. Therefore, the changes do not create the possibility for an accident or malfunction of a different type of equipment important to safety than any evaluated previously in the safety analysis report.

3) Does the subject of this evaluation reduce the margin of safety as defined in the basis for any technical specification?

   The margin of safety as defined in the Technical Specifications is not altered because operation of the head vent system is not changed.

Based upon the above, there is no unreviewed safety question.

Approved: 6/2/90

Unreviewed Safety Question Evaluation #90-088

Subject: Reload Safety Evaluation (RSE)

Description: The RSE provides the Unit 1 Cycle 3 loading pattern and summary of the supporting safety analysis.

Safety Evaluation:

1) Does the subject of this evaluation increase the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report?

   The proposed change supports the fuel design for Unit 1 Cycle 3. The change does not involve any plant equipment (other than the fuel) or procedures. Based upon previous discussions, changes to the safety analysis were addressed previously bounded by the existing safety analysis, or the license was amended and accepted by the NRC. Therefore, there is no increase in the probability of occurrence of an accident or malfunction of equipment important to safety previously analyzed in the SAR.

   The Chapter 15 analyses remain bounding for Unit 1 Cycle 3, so there is no change in the radiological dose due to accidents. Therefore, there is no increase in the consequences of an accident or malfunction of equipment important to safety previously analyzed in the SAR.

2) Does the subject of this evaluation create the possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report?

   Since the change is bounded by existing analyses in the safety analysis report, it does not create the possibility of an accident or malfunction of a different type than any evaluated previously in the safety analysis.

3) Does the subject of this evaluation reduce the margin of safety as defined in the basis for any technical specification?

   Since the Chapter 15 analysis is not impacted by the change, there is no reduction in safety as defined in the bases for any Technical Specification.

Based upon the above, there is no unreviewed safety question.

Approved: 5/18/90

Unreviewed Safety Question Evaluation #90-089

Subject: Essential Cooling Water System

Description: The subject system P&ID is being revised to show the inlet valves to the chillers and blowdown and drain valve as "lock-in-place." Also filter inlet valves are to be shown on the Unit 2 P&ID as normally open, rather than locked closed.

Safety Evaluation:

1) Does the subject of this evaluation increase the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report?

This change does not increase the probability of occurrence of an accident previously evaluated in the SAR because changing the indication of the subject manual valves does not impact the subject system design or system operation.

This change will not change, degrade or prevent actions; alter any assumptions or conclusions previously made; or result in any increase in accident doses for any accidents as previously evaluated in the SAR.

This change does not affect the function of the subject system. The Locked Valve Program prevents unauthorized operation of valves. To make the above indicated valves LIP or place the filter inlet valves in the surveillance program does not impact equipment Important To Safety (ITS) as defined in the SAR, nor does it cause an increase in the probability of an accident or malfunction of ITS equipment previously evaluated in the SAR.

The operability and functionability of the system is not affected by the above affected valves being LIP nor showing the filter inlet valves as normally open. Therefore, this change will not result in any increased consequences or changes in results, assuming a malfunction of ITS equipment, as defined in the design basis for the equipment Important To Safety previously evaluated in the SAR.

Unreviewed Safety Question Evaluation #90-089 (Cont'd)

2) Does the subject of this evaluation create the possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report?

This change will not create the possibility of an accident of a different type than previously evaluated in the SAR because the "lock" position is not described in the SAR or discussed in the SER, and does not change the operability or functionability of the system since the function of the "lock" is to prevent unauthorized operation.

Changing the valves listed above will not degrade the system operation/function and will not affect that of any safety-related system. The Safety Analysis Report is not affected by this change. Should the lock on the valves shown LIP fail or break, this event would not create a malfunction not previously evaluated in the design basis accident analysis nor does it create the possibility of a different type of malfunction of equipment important to safety than any previously evaluated in the SAR.

3) Does the subject of this evaluation reduce the margin of safety as defined in the basis for any technical specification?

Per review of Section 3/4.7.4 of the Plant Technical Specifications, this change does not affect any items or activities as discussed in the Plant Technical Specifications.

The "lock" position of these valves in the EW system, is not governed by any Plant Technical Specification. The Technical Specification does not require surveillance of valves locked-in-place, sealed or otherwise secured in position. Operability or functionability of the EW system, as described in the Plant Technical Specification, is not changed.

Based upon the above, there is no unreviewed safety question.

Approved: 5/10/90

Unreviewed Safety Question Evaluation #90-091

Subject: Spent Fuel Pool Water Level

Description: A separate annunciator window for Spent Fuel Pool Level (SFP) HI/LO condition is to be provided and the Inside Reactor Containment (IRC) Refueling Cavity water level and temperature input to the Main Control Room Annunciator are to be revised so these inputs are inhibited during modes one through four.

Safety Evaluation:

1) Does the subject of this evaluation increase the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report?

The increased probability of occurrence of an accident is not relevant. The Annunciator System is an indicator to aid operator response. No actions to and/or accident initiation of, equipment or components is caused by the Plant Annunciator System. This change will not increase the consequences of an accident that has been previously evaluated in the SAR.

This change will not increase the probability of occurrence of a malfunction of equipment important to safety since this modification will improve operator response time to a Spent Fuel Pool water level condition and the SAR sections that discuss equipment or control room and local alarms that alert the plant operators of a SFP HI/LO level condition are not impacted by this change. Also, no impact to the setpoint of the Spent Fuel Pool is involved. The Setpoint of +/-6" of the normal water level is not being changed. The Annunciator System is an indicator to aid operator response. No actions to and accident initiation of equipment or components is caused by the Plant Annunciator System.

This change will not increase the consequences of a malfunction of equipment important to safety since this modification is only to improve operator response time to a Spent Fuel Pool water level condition, and eliminate nuisance alarms during power operations by revising water level/temperature alarm input conditions. The Annunciator System is an indicator to aid operator response. No actions to and accident initiation of equipment or components is caused by the Plant Annunciator System.

Unreviewed Safety Question Evaluation #90-091 (Cont'd)

2) Does the subject of this evaluation create the possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report?

No possibility of an accident of a different type is created. This change does not alter the design intent as described in UFSAR/SER sections 9.1.2 and 9.1.4 and REG. GUIDE 1.13; the system will only be enhanced for maintainability, operator response time and elimination of nuisance alarms. The Annunciator system only responds to plant events. No actions are originated or initiated by this system.

This change will not create the possibility of a different type of malfunction of equipment important to safety since this modification is only to improve operator response time to a Spent Fuel Pool water level condition, and eliminate nuisance alarms during power operations by revising water level/temperature alarm input conditions. The SAR sections that discuss equipment or control room and local alarms that alert the plant operators of a SFP HI/LO level condition are not impacted by this change.

3) Does the subject of this evaluation reduce the margin of safety as defined in the basis for any technical specification?

This subject change will not reduce the margin of safety as defined in the Tech. Specs. since the Tech. Spec. sections that discuss the IRC Refueling Cavity and the Spent Fuel Pool water levels do not provide specific details of the water level monitoring requirements, and this change does not alter the design intent as described in UFSAR/SER sections 9.1.2 and 9.1.4 and REG. GUIDE 1.13.

Based upon the above, there is no unreviewed safety question.

Approved: 5/30/90

Unreviewed Safety Question Evaluation #90-092

Subject: Essential Chilled Water (CH) System

Description: The subject system P&ID is to be revised to restore vendor-supplied instruments and associated tubing and valves on the Chilled Water HVAC system chiller condensers with a note stating that these items have been abandoned-in-place with the wiring determinated. This change is to reflect the as-built condition.

Safety Evaluation:

1) Does the subject of this evaluation increase the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report?

This change does not increase the probability of occurrence of an accident previously evaluated in the SAR because restoring, with a note showing abandoned-in-place, the vendor supplied instruments and associated tubing and valves on the HVAC Essential Chilled Water System P&ID to agree with the design configuration does not change the systems design or operation.

The modification to show the instruments "abandoned-in-place" will not change, degrade, or prevent actions; alter any assumptions or conclusions previously made; or result in any increase in accident doses for any accidents as previously evaluated in the SAR.

Changing the P&IDs to show these instruments abandoned-in-place on the P&IDs does not impact either directly or indirectly any equipment Important To Safety (ITS) as defined in the SAR nor does it cause an increase in the probability of an accident or malfunction of ITS equipment previously evaluated in the SAR. Showing these instruments and lines on the P&IDs as abandoned-in-place does not affect the operability or functionability of the HVAC CH system as modified by the CCP because the vendor-supplied instrument's function was replaced by the modifications performed by the CCP. Therefore, this change will not result in any increased consequences or changes in results, assuming a malfunction of ITS equipment, as defined in the design basis for the equipment Important To Safety previously evaluated in the SAR.

Unreviewed Safety Question Evaluation #90-092 (Cont'd)

2) Does the subject of this evaluation create the possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report?

This change will not create the possibility of an accident of a different type than previously evaluated in the SAR because these instruments and lines were installed during the original evaluation of the HVAC CH system. Therefore, with the modifications performed by the CCP, this DCN does not change the operability or functionability of the system.

This change will not affect the HVAC CH systems operation or function or that of any associated system, and the Safety Analysis Report is not affected by this change. Should the line fail (leak or break), this event would not create a malfunction not previously evaluated in the design basis accident analysis nor does it create the possibility of a different type of malfunction of equipment important to safety than any previously evaluated in the SAR.

3) Does the subject of this evaluation reduce the margin of safety as defined in the basis for any technical specification?

This change does not affect any items or activities as discussed in the Plant Technical Specifications. These instruments are not governed by any plant Technical Specification.

Based upon the above, there is no unreviewed safety question.

Approved: 5/15/90

Unreviewed Safety Question Evaluation #90-094

Subject: Radiologically Restricted Area Access Control

Description: Modifications are to be made to RRA's by removing walls and decontamination sinks and providing new doors and furnishings to support quicker access/egress of workers to and from RRA's and provide direct visual contact and control of workers' activities.

Safety Evaluation:

1) Does the subject of this evaluation increase the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report?

   This configuration change does not impact the design basis of the plant and does not impact the Appendix R program or the Appendix R/Appendix A deviation of the FHAR. Based on this evaluation, this change does not increase the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety nor does it create the possibility for an accident or malfunction of a different type than any previously evaluated in the safety analysis report.

2) Does the subject of this evaluation create the possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report?

   See (1). This change does not create the possibility for an accident or malfunction of a different type than any previously evaluated in the safety analysis report.

3) Does the subject of this evaluation reduce the margin of safety as defined in the basis for any technical specification?

   This change does not reduce the margin of safety as defined in the basis for any technical specifications since the technical specifications do not address the subject of this modification.

   There is no impact on any safety-related systems or components addressed in the technical specifications since there is no equipment qualification impact or any impact to safety-related equipment due to flooding or Seismic II/I as discussed in the response to Questions 1 and 2.

Based upon the above, there is no unreviewed safety question.

Approved: 5/30/90

Unreviewed Safety Question Evaluation #90-095

Subject: HVAC Supply Header Temperature Switches

Description: Use the ERFDADS computer to interlock the EAB and Control Room (CR) temperature switches on the supply air from the duct chillers with the supply fan run signal so that the alarm is only received if the train is operating.

Safety Evaluation:

1) Does the subject of this evaluation increase the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report?

   These changes do not impact the safety-related equipment portion of these HVAC systems in any way. These changes affect nonsafety instrumentation and alarms associated with the EAB and CR HVAC supply system only. These changes make the control room alarms more meaningful to the Operators which does not increase the probability of occurrence of an accident or malfunction of equipment important to safety previously evaluated in the SAR.

   These changes do not impact the physical operating parameters or capabilities of the EAB and CR HVAC supply systems. These changes serve to make the alarms more meaningful to the Operators by eliminating nuisance alarms, so there is no increase to the consequences of an accident or malfunction of equipment important to safety previously evaluated in the SAR.

2) Does the subject of this evaluation create the possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report?

   As nonsafety alarms which have no control function, these temperature switches cannot create the possibility of an accident of a different type than any previously evaluated in the SAR. These temperature switches cannot create the possibility of a different type of malfunction of equipment important to safety than any previously evaluated in the SAR. These temperature switches will have no effect on system function or operability.

Unreviewed Safety Question Evaluation #90-095 (Cont'd)

3) Does the subject of this evaluation reduce the margin of safety as defined in the basis for any technical specification?

This change only affects the nonsafety temperature monitoring of the EAB and CR HVAC supply air from the air handling unit cooling coils and does not change the temperature control in any manner. Area temperature monitoring is unaffected as is EAB and CR HVAC supply system operability.

Based upon the above, there is no unreviewed safety question.

Approved: 5/30/90

Unreviewed Safety Question Evaluation #90-096

Subject: Alternate Valve Packing and Live Load Design

Description: This specification provides alternate valve stem packing design approved for installation as a maintenance activity in place of the vendor designed packing and allows optional addition of live loading to gland studs.

Safety Evaluation:

1) Does the subject of this evaluation increase the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report?

   Adding live load equipment to selected valves, including lengthened gland studs, will decrease the probability of packing failure and packing leakage by maintaining proper gland pressure over a wider range of inservice consolidation.

   Consequences of leakage are determined by fluid activity levels, fluid properties, and system interaction effects, none of which are affected by this specification. Therefore, this specification will not increase the consequences of an accident previously evaluated in the Safety Analysis Report.

   The analysis of piping and supports will not be affected by live loading the valve. The packing materials used per this specification will be suitable for the process conditions. This specification does not increase the probability of a malfunction of equipment important to safety previously evaluated in the Safety Analysis Report.

2) Does the subject of this evaluation create the possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report?

   The sole function of valve packing is to prevent leakage along the valve stem without creating excessive friction on the stem. Failure to achieve this function has been previously analyzed. Use of this specification can not create the possibility of an accident of a different type than any previously evaluated in the Safety Analysis Report.

   The only equipment important to safety that valve packing could affect in any manner is the subject valve. Failures of all valves which are important to safety have been analyzed in the Safety Analysis Report. Therefore, this specification can not create the possibility of a different type of malfunction of equipment important to safety than any previously evaluated in the Safety Analysis Report.

Unreviewed Safety Question Evaluation #90-096 (Cont'd)

3) Does the subject of this evaluation reduce the margin of safety as defined in the basis for any technical specification?

Operability of all active valves required for system operability is a basis for all system-related Technical Specifications. Packing design and materials, and live loaded gland studs per this specification will not affect operability of the affected valves. Valves packed per this specification will have packing leakage less than or equal to the original design (essentially zero in most cases). Therefore, this specification does not reduce the margin of safety as defined in the basis for any Technical Specification.

Based upon the above, there is no unreviewed safety question.

Approved: 5/30/90

Unreviewed Safety Question Evaluation #90-097

Subject: HVAC-Technical Support Center Chilled Water System

Description: Designators are to be added to the subject system P&ID to show valve operational positions.

Safety Evaluation:

1) Does the subject of this evaluation increase the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report?

   These changes are editorial and are made to reflect the operational characteristics of the system and comply with plant procedures. They do not alter the function of the system. Because they do not alter system design or operation, they do not increase the possibility or consequences of an accident previously evaluated in the UFSAR.

   No function of equipment is altered by these changes; therefore, there is no increase in the probability of equipment malfunction associated with this system.

   This change will not increase the consequences of equipment failure because the operation and form of the system is not altered. Therefore, already postulated equipment failures are not changed and consequences are not increased.

2) Does the subject of this evaluation create the possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report?

   No possibility of an accident not already postulated in the UFSAR is created as there is no change to the overall system and thus no change in accident scenarios. The only change is to the system P&ID, and is made to reflect the predetermined operational condition of the system. No equipment in the system is added or deleted, and no pipe boundary or valve position is changed. Therefore, no equipment failure not already evaluated in the UFSAR is possible.

3) Does the subject of this evaluation reduce the margin of safety as defined in the basis for any technical specification?

   No margin of safety as defined in the Technical Specifications is altered because operation of the TSC Chilled Water system is not changed. No system equipment is altered, and no function is changed.

Based upon the above, there is no unreviewed safety question.

Approved: 5/30/90

Unreviewed Safety Question Evaluation #90-098

Subject: Unit 1 Cycle 3 Core Operating Limits Report

Description: This evaluation addresses the Unit 1 Cycle 3 Core Operating Limits Report. The report notes an increase in the Radial Peaking Factor.

Safety Evaluation:

1) Does the subject of this evaluation increase the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report?

   The parameter in question is a power peaking limit. The Fxy limits are used in the calculation of the Heat Flux Hot Channel Factor, F_Q. The F_Q limit is what is actually used in the safety evaluation and remains unchanged from the previous cycle. Therefore, since F_Q remains unchanged as a result of this change, there is no increase in the probability of an accident not previously analyzed in the SAR.

   The radial peaking factor used in the existing analysis remains unchanged, so the radiological consequences as documented in FSAR Table 15.7-10 remain bounding. Thus, there is no increase in consequences.

   Since F_Q remains unchanged as a result of this change, there is no increase in the probability of occurrence or consequences of a malfunction of equipment important to safety previously evaluated in the SAR.

2) Does the subject of this evaluation create the possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report?

   The revision of Fxy does not create the possibility for an accident of a different type than any evaluated previously in the safety analysis report. Fxy is used in calculating the F_Q limit which is used in the safety analysis report. The F_Q limit is not changed by the change in Fxy.

Unreviewed Safety Question Evaluation #90-098 (Cont'd)

3) Does the subject of this evaluation reduce the margin of safety as defined in the basis for any technical specification?

Limits are set on Fxy since it is Fxy that is evaluated to determine if $F_Q(z)$ is within its Tech. Spec. limit. The value of Fxy does not appear in the safety analysis. It is used in the core design to confirm that actual F_Q's are below the F_Q limits set in the Tech. Specs. (3.2.2) and used in the safety analysis. Since the $F_Q(z)$ limit remains unchanged and the fuel design limits remain unchanged, there is no reduction in margin of safety as defined in the basis of any technical specification.

Based upon the above, there is no unreviewed safety question.

Approved: 5/18/90

Unreviewed Safety Question Evaluation #90-100

Subject: Access Control to the RCB Personnel Airlock

Description: This modification adds an Access Control Room and a Health Physics Count Room and their associated equipment to the Mechanical Auxiliary Building. Security barriers and a new access to the Fuel Handling Building are also added.

Safety Evaluation:

1) Does the subject of this evaluation increase the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report?

   The subject of this evaluation does not increase the probability or consequences of an accident previously evaluated in the SAR since this change is basically a configuration change to the structure only and does not affect the operability of any safe shutdown components or systems. The changes do not affect the design basis transients or malfunctions for the accidents described in Chapters 6 and 15 of the SAR.

   The subject of this evaluation does not increase the probability of occurrence or consequences of a malfunction of equipment important to safety previously evaluated in the SAR since this modification does not affect any equipment, both directly or indirectly. This change is a structural configuration change only and does not impact the operability of any systems or components.

2) Does the subject of this evaluation create the possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report?

   The subject of this evaluation does not create the possibility of an accident of a different type than any previously evaluated in the SAR. This change is a structural configuration change and does not impact the operability of any plant systems or components. The design of the various structural components includes the design for seismic loads to prevent damage to safety-related components. The additional combustible loads added by this change have been evaluated and are bounded by current analyses. This change has no impact on the internal flooding analyses since no new water sources have been added, nor does it impact the existing drainage.

Unreviewed Safety Question Evaluation #90-100 (Cont'd)

The subject of this evaluation does not increase the possibility of a different type of equipment malfunction of equipment important to safety than any previously evaluated in the SAR since it does not affect any equipment important to safety.

3) Does the subject of this evaluation reduce the margin of safety as defined in the basis for any technical specification?

The subject of this evaluation does not reduce the margin of safety as defined in the basis of the Technical Specifications since this change is basically a structural configuration change only and does not affect the operability of any plant systems or components. The Tech. Specs. do not address structural configuration changes.

Based upon the above, there is no unreviewed safety question.

Approved: 5/30/90

Unreviewed Safety Question Evaluation #90-101

Subject: Steam Generator Drain Line

Description: A broken weld was discovered in the steam generator drain line upstream of valve RC-0097. This valve is to be replaced by a threaded pipe cap to provide isolation of the steam generator drain line.

Safety Evaluation:

1) Does the subject of this evaluation increase the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report?

The probability of failure of the subject drain line will not be increased by usage of welded pipe caps instead of steam generator drain valves to provide isolation of the steam generator drain lines since the existing orifice limits the flow area to within the design basis. Identical isolation of the drain lines is provided by use of a threaded pipe cap and welding.

The probability of failure of the subject drain line will not be increased by use of a welded pipe cap instead of the existing drain valves. Pressure boundary integrity will be ensured.

The small break LOCA has been analyzed in SAR Section 15.6.5. The consequences of this accident are unchanged. Failure of this drain line is bounded by the existing analysis since the normal makeup system is capable of maintaining pressurizer level and pressure in conjunction with the break flow.

The subject of this evaluation does not increase the probability of occurrence of safety-related equipment malfunction. Postulated leakage from a steam generator drain line is bounded by the requirements of TS 3/4.4.6. Therefore, there is no increase in the possibility of equipment malfunction.

Postulated leakage from a steam generator drain line is well within the analyzed design basis. The consequences of malfunction of equipment such as the normal changing system are unchanged since the flow required to maintain pressurizer water level and pressure given failure of a steam generator drain line is significantly less than that required for the design basis small line break analysis; thus, the analysis is still bounding. The consequences of failure of a steam generator drain pipe are unchanged regardless of whether the isolation is provided by the existing valve or the threaded and welded pipe cap.

Unreviewed Safety Question Evaluation #90-101 (Cont'd)

2) Does the subject of this evaluation create the possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report?

The spectrum of pipe breaks has been previously analyzed in the SAR. Failure of a steam generator drain line is bounded by the small line break analysis given in SAR Section 15.6.5. The occurrence of unidentified and identified leakage has also been evaluated and is controlled by the technical specifications. Consequently, an accident of a different type is not created. Use of a welded threaded connection meets the same requirements as the existing pipe to valve inlet welded connection. Both configurations have been analyzed and are acceptable.

Use of a pipe cap to replace the steam generator drain valves does not result in the possibility of a different type of malfunction of equipment than evaluated in the SAR. Postulated leakage of this drain line has no effect on any safety-related equipment.

3) Does the subject of this evaluation reduce the margin of safety as defined in the basis for any technical specification?

The margin of safety as given in the Technical Specification Bases is the difference between the allowable identified and unidentified leakage given in TS 3/4.4.6 and the level which would correspond to exceeding the capability of the makeup system to replenish the loss. Maintaining leakages within the TS limits ensures that the capability of the makeup systems is maintained. Since the total leakage must be within these bounds, the margin of safety is maintained. Use of a welded threaded connection performed in accordance with the ASME code provides the same strength as the existing pipe to valve inlet weld connection and meets all design and licensing requirements.

Based upon the above, there is no unreviewed safety question.

Approved: 5/14/90

Unreviewed Safety Question Evaluation #90-102

Subject: Feedwater (FW) System

Description: The valve number for vent valve MS0565 is to be corrected on the subject system P&ID to MS0569.

Safety Evaluation:

1) Does the subject of this evaluation increase the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report?

   Correcting this vent valve number does not affect the system design basis or operation of the plant. Therefore, this change does not increase the probability of occurrence or consequences of an accident previously evaluated in the UFSAR.

   This change does not affect operability or functionability of the FW system and does not impact equipment important to safety. Therefore, this change does not increase the probability of occurrence of a malfunction of equipment important to safety previously evaluated in the UFSAR.

   This valve is a normally closed vent valve and does not impact any equipment important to safety as defined in the UFSAR nor does it increase the consequences of a malfunction of equipment important to safety previously evaluated in the UFSAR.

2) Does the subject of this evaluation create the possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report?

   Correcting this vent valve number does not affect the FW system operation or function. Should the valve or line fail (leak or break), this event would not create the possibility of an accident of a different type than any previously evaluated in the UFSAR, nor create the possibility of a different type of malfunction of equipment important to safety than previously evaluated in the UFSAR.

Unreviewed Safety Question Evaluation #90-102 (Cont'd)

3) Does the subject of this evaluation reduce the margin of safety as defined in the basis for any technical specification?

Technical Specification 3/4.7 was reviewed. The FW system is not governed by any Technical Specifications. Operational and functional requirements of the FW system are not changed by indicating the correct valve number. Therefore, this change does not reduce the margin of safety as defined in the basis for any Technical Specification.

Based upon the above, there is no unreviewed safety question.

Approved: 5/30/90

Unreviewed Safety Question Evaluation #90-103

Subject: Fire Loads

Description: The FHAR is being revised to reflect the various combustible materials being stored in the units. Also, the FHAR change notice will identify fire suppression systems which are for property protection only and show as-built information.

Safety Evaluation:

1) Does the subject of this evaluation increase the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report?

   The Appendix R analysis shows that the plant can safely shutdown with all those circuits and components being lost to a fire. Furthermore, the STP Appendix R safe shutdown analysis provides greater margin than required by Appendix R by assuring two redundant safe shutdown paths, with a fire in any given fire area. Therefore, since the fire barriers surrounding the fire areas are three-hour rated or equal and the fire severity is less than three hours, the existing Appendix R safe shutdown analysis is bounding.

   Other changes meet the requirements of Appendix A and Appendix R. Therefore, there is no increase in the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report.

2) Does the subject of this evaluation create the possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report?

   Based on the discussion and evaluation in (1), the subject of this evaluation does not create the possibility of an accident of a different type or of a different type of malfunction of equipment important to safety than any previously evaluated.

3) Does the subject of this evaluation reduce the margin of safety as defined in the basis for any technical specification?

   The Fire Protection Program is not governed by the Technical Specifications. Thus, the subject of this evaluation does not reduce the margin of safety as defined in the Technical Specifications.

Based upon the above, there is no unreviewed safety question.

Approved: 5/18/90

Unreviewed Safety Question Evaluation #90-104

Subject: Demineralized Water (DW) System

Description: Pump numbers are to be added to the subject system P&ID.

Safety Evaluation:

1) Does the subject of this evaluation increase the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report?

   Adding pump numbers to the P&ID does not affect the system design basis or operation of the plant. Therefore, this change does not increase the probability of occurrence or consequences of an accident previously evaluated in the UFSAR.

   Adding pump numbers does not change the physical configuration of the plant; it does not affect the design basis or operation of the plant, and does not impact equipment considered important to safety. Therefore, this change does not increase the probability of occurrence or consequences of a malfunction of equipment important to safety previously evaluated in the UFSAR.

2) Does the subject of this evaluation create the possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report?

   This change does not affect the DW system operation or function. Should the pump fail, this event would not create the possibility of a different type of accident or malfunction of equipment important to safety than any previously evaluated in the UFSAR.

3) Does the subject of this evaluation reduce the margin of safety as defined in the basis for any technical specification?

   Section 3/4.7 of the Plant Technical Specifications was reviewed. The DW system is not governed by the Plant Technical Specifications. Operational and functional requirements are not altered by this change. Therefore, this change does not reduce the margin of safety as defined in the basis for any Plant Technical Specification.

Based upon the above, there is no unreviewed safety question.

Approved: 5/30/90

Unreviewed Safety Question Evaluation #90-105

Subject: Unit 1 Mechanical Auxiliary Building Main Ventilation Heaters

Description: This change calls for temporary utilization of spare heater elements and associated wiring modifications to permit heating unit operation.

Safety Evaluation:

1) Does the subject of this evaluation increase the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report?

Installation of this Temporary Modification will not increase the probability of the occurrence of an accident as previously evaluated in the SAR. The MAB ventilation system is a nonsafety quality class 9 system. No safety-related equipment is dependent on this ventilation system or its operation. Therefore, installation of this Temporary Modification will not affect the operation or performance of any safety-related equipment as evaluated in the SAR.

Installation of this Temporary Modification will not increase the probability of a malfunction of equipment important to safety previously evaluated in the SAR. Installation of this Temporary Modification does not affect any other systems or components that could increase the consequences of an accident previously evaluated in the SAR.

The installation of this Temporary Modification will not increase the probability of a malfunction of equipment important to safety previously evaluated in the SAR. No safety-related equipment is dependent on this ventilation system for its operation. The installation of this Temporary Modification does not affect any other systems or components that could affect or increase the probability of malfunction of safety-related equipment.

Installation of this Temporary Modification will not increase the consequences of a malfunction of equipment important to safety previously evaluated in the SAR. No safety-related equipment or systems are affected by this Temporary Modification. Installation of this Temporary Modification does not affect any other systems or components that could increase the consequences of a malfunction of equipment important to safety.

Unreviewed Safety Question Evaluation #90-105 (Cont'd)

2) Does the subject of this evaluation create the possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report?

Installation of this Temporary Modification will not create the possibility of an accident of a different type than any previously evaluated in the SAR. The MAB Main ventilation system is a nonsafety-related system serving the nonsafety-related components and areas of the MAB. Installation of this Temporary Modification does not affect any other systems or components that could create the possibility of an accident of a different type not previously evaluated in the SAR.

Installation of this Temporary Modification will not create the possibility of a different type of malfunction of equipment important to safety previously evaluated in the SAR. The MAB main ventilation system is a nonsafety-related system serving the nonsafety-related components and areas of the MAB. No safety-related equipment or systems are affected by this Temporary Modification.

3) Does the subject of this evaluation reduce the margin of safety as defined in the basis for any technical specification?

Installation of this Temporary Modification will not reduce the margin of safety as defined in the basis for any Technical Specification. The Temporary Modification of this evaluation does not require a change to nor does it affect the Plant Technical Specifications. The MAB main ventilation system is not addressed by the Plant Technical Specifications, nor does the subject of this change affect any systems that are addressed by Plant Technical Specifications.

Based upon the above, there is no unreviewed safety question.

Approved: 6/02/90

Unreviewed Safety Question Evaluation #90-106

Subject: FHAR Revision

Description: The FHAR is to be revised to reflect Appendix R analysis update for Unit 1 and as-built configuration for Unit 2.

Safety Evaluation:

1) Does the subject of this evaluation increase the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report?

   The level of fire protection and the ability to safely shutdown the plant has not been reduced. Therefore, the subject of this evaluation does not increase the probability of occurrence of an accident nor does it increase the consequences of an accident as previously evaluated in the SAR. Furthermore, calculations and reviews indicate that the subject of this evaluation does not increase the probability of occurrence of malfunction nor the consequences of a malfunction to safe shutdown equipment previously evaluated in the SAR.

2) Does the subject of this evaluation create the possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report?

   The subject of this evaluation is consistent with previous analyses performed for fire protection/Appendix R. The revision of the Appendix R Safe Shutdown Calculations has shown that there are no possibilities of an accident of a different type nor the possibility of a malfunction of safe shutdown equipment of a different type than any previously evaluated in the SAR.

3) Does the subject of this evaluation reduce the margin of safety as defined in the basis for any technical specification?

   The fire protection program is not governed by any Technical Specifications, and these changes do not reduce the margin of safety.

Based upon the above, there is no unreviewed safety question.

Approved: 6/02/90

Unreviewed Safety Question Evaluation #90-107

Subject: Revised FHAR Figures

Description: Figures in the FHAR are to be revised to agree with the as-installed plant condition.

Safety Evaluation:

1) Does the subject of this evaluation increase the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report?

These changes do not alter the fire protection/Appendix R program. The fire barriers and fire detection/suppression devices will continue to operate or be available with no compromise or integrity. Equipment affected is not needed for safe shutdown of the plant. Therefore, there is no increase in the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report.

2) Does the subject of this evaluation create the possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report?

Documentation of the actual configuration of the plant and fire suppression devices locations does not introduce any new types of accidents or malfunctions of equipment important to safety.

3) Does the subject of this evaluation reduce the margin of safety as defined in the basis for any technical specification?

None of the affected equipment in this change is covered by Technical Specifications. The Fire Protection program is not governed by Technical Specifications. Therefore, there is no reduction in the margin of safety as defined in the basis for any technical specification.

Above, there is no unreviewed safety question.

Unreviewed Safety Question Evaluation #90-107

Subject: Revised FHAR Figures

Description: Figures in the FHAR are to be revised to agree with the as-installed plant condition.

Safety Evaluation:

1) Does the subject of this evaluation increase the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report?

   These changes do not alter the fire protection/Appendix R program. The fire barriers and fire detection/suppression devices will continue to operate or be available with no compromise or integrity. Equipment affected is not needed for safe shutdown of the plant. Therefore, there is no increase in the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report.

2) Does the subject of this evaluation create the possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report?

   Documentation of the actual configuration of the plant and fire suppression device locations does not introduce any new types of accidents or malfunctions of equipment important to safety.

3) Does the subject of this evaluation reduce the margin of safety as defined in the basis for any technical specification?

   None of the affected equipment in this change is covered by Technical Specifications. The Fire Protection program is not governed by Technical Specifications. Therefore, there is no reduction in the margin of safety as defined in the basis for any technical specification.

Based upon the above, there is no unreviewed safety question.

Approved: 6/2/90

Unreviewed Safety Question Evaluation #90-108

Subject: Fire Area Boundary

Description: FHAR Section 3.2, Fire Areas 13 and 15, Part A and Figure 3-16 are to be revised to show entire areas bounded by 3-hour rated barrier including HVAC duct extension to the control room.

Safety Evaluation:

1) Does the subject of this evaluation increase the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report?

   The subject of this evaluation does not alter the probability of occurrence of an accident previously evaluated in the USAR. The subject of this evaluation provides for protection against the effects of an accident described in the USAR.

   The subject of this evaluation reduces the consequences of an accident previously evaluated in the SAR. By providing fire wrap and fire dampers to the control room HVAC system, from the control room air risers to the control room, habitability of the control room is assured even after a fire in the corridor outside the control room.

   By protecting the HVAC duct to the control room, availability of the control room and the components therein is assured. Thus, the subject of this evaluation reduces the probability of occurrence of a malfunction of equipment important to safety previously evaluated in the SAR.

   The subject of this evaluation eliminates the consequences a fire would have on operation of the control room HVAC.

2) Does the subject of this evaluation create the possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report?

   Protection of the control room HVAC ducting assures habitability of the control room during a fire in the corridor outside the control room. The modification was reviewed for other types of accidents which may have been introduced, and none were identified. The changes only affect the control room and the control room HVAC system.

Unreviewed Safety Question Evaluation #90-108 (Cont'd)

3) Does the subject of this evaluation reduce the margin of safety as defined in the basis for any technical specification?

The fire protection program is not governed any Technical Specifications, and thus no margins are affected.

Based upon the above, there is no unreviewed safety question.

Approved: 6/07/90

Unreviewed Safety Question Evaluation #90-110

Subject: Bottom-Mounted Instrumentation (BMI) Flux Thimble

Description: During thimble insertion following refueling, the thimble for location D12 became stuck and the guide tube stub was bent. The thimble is to be removed from service by capping.

Safety Evaluation:

1) Does the subject of this evaluation increase the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report?

   The corrective action does not impact the pressure boundary function of the high pressure seal fitting. A leakage check will be performed during unit startup when the RCS is pressurized. Thus the probability of occurrence of an accident or malfunction previously evaluated is not increased.

   The charging pump capacity is more than adequate to handle a single leaking thimble at RCS pressure of 2250 psig. Since this corrective action concerns only a single thimble, the statement in the letter is applicable. There would be no offsite radiological consequences since the charging pump could maintain RCS inventory. Thus, there are no increased consequences of an accident or malfunction.

2) Does the subject of this evaluation create the possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report?

   This corrective action pertains only to the incore instrumentation system - specifically to thimble D12. No other safety-related components are impacted. The only potential accident is RCS leakage. Thus, this corrective action does not create the possibility of a different type of accident or malfunction of equipment important to safety than previously evaluated in the SAR.

3) Does the subject of this evaluation reduce the margin of safety as defined in the basis for any technical specification?

   The basis for T.S. 3/4.2.4 specifically mentions eight thimbles that are needed for the four pairs of symmetric thimble locations used to confirm the Quadrant Power Tilt Ratio. Location D12 is not one of these. The bases of the other Technical Specifications are not impacted by this corrective action.

Based upon the above, there is no unreviewed safety question.

Approved: 5/17/90

Unreviewed Safety Question Evaluation #90-112

Subject: Standby Diesel Generator Air Combustion Intercoolers

Description: Under this temporary modification to Standby Diesel Generator 13, an expansion joint in the essential cooling water supply to the air combustion intercoolers is to be replaced with a solid pipe spool piece.

Safety Evaluation:

1) Does the subject of this evaluation increase the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report?

The change from an expansion joint to a solid spool piece does not increase the probability of the occurrence of an accident because the solid spool piece is as strong or stronger than the expansion joint. The corrosion resistance is being enhanced by the application of Belzona S Ceramic lining. The spool piece will also be hydrostatically tested to 150 PSI, which is 30 PSI more than the EW system was tested. This testing will assure the spool piece integrity is equal to or better than the component being replaced. Unit 2 was modified during construction and a solid spool piece was installed in the same location on SBDG #23. This change is reflected in the FSAR Figure 9.5.5-1 for Unit 2 and this is part of the licensing basis.

Installation of a solid spool piece in place of the expansion joint will not affect the operation of the SBDG because it will not change the capacity of the system to supply cooling water to the SBDG. The change from Aluminum Bronze to Carbon Steel with Belzona "S" Ceramic lining will not affect the capacity of the EW system to supply cooling water to the SBDG. With the Belzona Ceramic "S" lining the carbon steel spool piece will not corrode and thereby this eliminates or greatly reduces the probability of leakage. This will not happen within the period of time set for this modification to be in service based on actual operating experience with the carbon steel pipe operating in the SBDG EW intercooling piping on all six Diesels.

Unreviewed Safety Question Evaluation #90-112 (Cont'd)

The consequences of a malfunction of the SBDG's or EW system as previously evaluated are not affected by this modification. The spool piece is stronger and has been analyzed with acceptable design limits by means of approved calculations. This modification will not involve a change to any radioactivity release.

2) Does the subject of this evaluation create the possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report?

Installation of a solid spool piece equal to or stronger than the expansion joint will not create an accident of a different nature.

No destructive evidence to piping on the diesel or diesel auxiliary skid has been found during monthly walkdown inspections. Use of this spool piece will not create any different malfunctions that would preclude ECW from serving the diesel intercooler.

3) Does the subject of this evaluation reduce the margin of safety as defined in the basis for any technical specification?

The Technical Specifications address the operability of the SBDG's. The piping material or the expansion joints are not addressed. The change from the expansion joint to a solid spool piece will not affect the fit or function of the SBDG's or their subsystems. Therefore, the margin of safety as defined will not be reduced.

Based upon the above, there is no unreviewed safety question.

Approved: 5/18/90

Unreviewed Safety Question Evaluation #90-113

Subject: Auxiliary Feedwater System

Description: The subject system P&ID is being revised to correct the size of valve MS0607 from 1-inch to 1/2-inch to conform to the as-built configuration and be consistent with other design parameters.

Safety Evaluation:

1) Does the subject of this evaluation increase the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report?

Causes and analysis for conditions which require the use of the AFW system, including loss of coolant from small breaks are discussed in Chapter 15 of the UFSAR. This change does not affect this analysis. Indicating the correct valve size does not affect the system design basis or operation of the plant because the function of the system has not changed. Therefore, this change does not increase the probability of occurrence of an accident previously evaluated in the UFSAR.

Indicating the correct valve size on the P&ID's does not change, degrade, or prevent actions; alter any assumptions or conclusions previously made; or result in any increase in accident doses for any accident because the function of the line is unchanged. Therefore, this change does not increase the consequences of an accident previously evaluated in the UFSAR.

Indicating the correct valve number on the P&ID's does not affect the system design basis or operation of the plant. This change does not affect operability or functionability of the AFW system because this normally closed drain valve will be used only when draining of the steam trap is required. This change does not impact either directly or indirectly any equipment important to safety. Therefore, this change does not increase the probability of occurrence of a malfunction of equipment important to safety previously evaluated in the UFSAR.

This change does not impact equipment important to safety as defined in the UFSAR nor does it increase the consequences of a malfunction of equipment important to safety previously evaluated in the UFSAR.

Unreviewed Safety Question Evaluation #90-113 (Cont'd)

2) Does the subject of this evaluation create the possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report?

This change does not affect operability and functionability of the AFW system or that of any safety-related system. Indicating the correct valve size on the P&ID's would not create the possibility of an accident or malfunction of equipment important to safety than previously evaluated in the UFSAR.

3) Does the subject of this evaluation reduce the margin of safety as defined in the basis for any technical specification?

Technical Specification 3/4.7.1.2 does not discuss or refer to steam trap drain valve size for the AFW system. Operational and functional requirements of the AFW system are not changed by indicating the correct valve size on the P&ID. Therefore, this change does not reduce the margin of safety as defined in the basis for any Technical Specification.

Based upon the above, there is no unreviewed safety question.

Approved: 6/02/90

Unreviewed Safety Question Evaluation #90-114

Subject: NSRB Composition

Description: UFSAR Section 13.4.2.1 currently states that each NSRB member "may have an alternate appointed by the Group Vice President, Nuclear." This is to be revised to state: "The Group Vice President, Nuclear shall also appoint all alternate members."

Safety Evaluation:

1) Does the subject of this evaluation increase the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report?

   The proposed change is administrative in nature and does not involve any changes to plant design or configuration or the basis of any Technical Specification.

2) Does the subject of this evaluation create the possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report?

   The proposed change is administrative in nature and does not involve any changes to plant design or configuration or the basis of any Technical Specification.

3) Does the subject of this evaluation reduce the margin of safety as defined in the basis for any technical specification?

   The proposed clarification remains consistent with TS 6.5.2.3 and does not reduce any margin of safety.

Based upon the above, there is no unreviewed safety question.

Approved: 6/06/90

Unreviewed Safety Question Evaluation #90-115

Subject: Hotwell Dump Pump

Description: This modification provides for installation of a larger Hotwell Dump Pump and elimination of the flow path to the oily waste system.

Safety Evaluation:

1) Does the subject of this evaluation increase the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report?

This modification will not increase the probability of occurrence of an accident since the systems that are affected (Condensate and Condensate Polishing) are all non-nuclear safety-related. Components involved in this modification (Hotwell Dump Pump, Condenser, Condensate Polishing Sumps and Pumps, Deaerator and TGB Sumps) are all non-nuclear safety-related. None of the activities involved are safety-related, nor do they affect safety-related systems or components.

This modification will not increase the consequences of an accident. This modification will reduce the consequences of an accident such as a steam generator tube leak by eliminating the possibility that the Hotwell Dump Pump discharge will be pumped to the Oily Waste System. The new flow path will take the Hotwell Dump Pump discharge to the Condensate Polishing Sumps where it can be monitored and sent to the Low Total Dissolved Solids tanks and treated. This will allow for better control of potentially contaminated Hotwell Dump Pump discharge.

This modification will not increase the probability of a malfunction of equipment important to safety. Equipment modified is not safety-related, and safety-related systems or components are not affected.

Problems caused by failure of the Hotwell Dump Pump or piping associated with this modification are not related to the safe shutdown of the plant, nor do they impede operation of any safety-related equipment.

Unreviewed Safety Question Evaluation #90-115 (Cont'd)

2) Does the subject of this evaluation create the possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report?

No new accident pattern is postulated. This modification will correct some deficiencies in the design of the CD system. This modification will not introduce any new types of accidents or malfunctions of equipment important to safety.

3) Does the subject of this evaluation reduce the margin of safety as defined in the basis for any technical specification?

The Hotwell Dump Pump is not part of any Technical Specification. This modification will not reduce the margin of safety of any of the Technical Specifications.

Based upon the above, there is no unreviewed safety question.

Approved: 6/14/90

Unreviewed Safety Question Evaluation #90-117

Subject: Chlorine Gas

Description: FSAR Section 9.2.4.2 is to be revised to delete reference to utilization of chlorine gas for the chlorination facility at the Nuclear Training Facility. Sodium hypochlorite is now used for chlorination of well water. The change is consistent with other FSAR references.

Safety Evaluation:

1) Does the subject of this evaluation increase the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report?

Chlorine gas has not been analyzed for potential hazards on the STP site. Chlorine gas is not considered in any accident analysis. The STP site does not monitor for chlorine gas. Use of chlorine gas is not considered in any Technical Specification. Use of liquid sodium hypochlorite at the NTF eliminates the potential hazards from chlorine gas.

The UFSAR discusses the use of liquid sodium hypochlorite on the STP site, primarily for use as a biocide treatment. Use of liquid sodium hypochlorite does not affect any equipment important to safety. The effects of release of liquid sodium hypochlorite to the environment or the use of liquid sodium hypochlorite is not discussed in any accident analysis in the UFSAR. Release of liquid sodium hypochlorite is considered in the UFSAR and since the amount of chlorine is extremely small, it is not considered a hazard. The possibilities of an accident have been considered and found to not be a hazard. Use of dilute liquid sodium hypochlorite does not present any threat to the control room. Use of liquid sodium hypochlorite is not considered in any Technical Specification.

2) Does the subject of this evaluation create the possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report?

See discussion under (1).

3) Does the subject of this evaluation reduce the margin of safety as defined in the basis for any technical specification?

See discussion under (1).

Based upon the above, there is no unreviewed safety question.

Approved: 9/17/90

Unreviewed Safety Question Evaluation #90-117

Subject: Chlorine Gas

Description: FSAR Section 9.2.4.2 is to be revised to delete reference to utilization of chlorine gas for the chlorination facility at the Nuclear Training Facility. Sodium hypochlorite is now used for chlorination of well water. The change is consistent with other FSAR references.

Safety Evaluation:

1) Does the subject of this evaluation increase the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report?

   Chlorine gas has not been analyzed for potential hazards on the STP site. Chlorine gas is not considered in any accident analysis. The STP site does not monitor for chlorine gas. Use of chlorine gas is not considered in any Technical Specification. Use of liquid sodium hypochlorite at the NTF eliminates the potential hazards from chlorine gas.

   The UFSAR discusses the use of liquid sodium hypochlorite on the STP site, primarily for use as a biocide treatment. Use of liquid sodium hypochlorite does not affect any equipment important to safety. The effects of release of liquid sodium hypochlorite to the environment or the use of liquid sodium hypochlorite is not discussed in any accident analysis in the UFSAR. Release of liquid sodium hypochlorite is considered in the UFSAR and since the amount of chlorine is extremely small, it is not considered a hazard. The possibilities of an accident have been considered and found to not be a hazard. Use of dilute liquid sodium hypochlorite does not present any threat to the control room. Use of liquid sodium hypochlorite is not considered in any Technical Specification.

2) Does the subject of this evaluation create the possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report?

   See discussion under (1).

3) Does the subject of this evaluation reduce the margin of safety as defined in the basis for any technical specification?

   See discussion under (1).

Based upon the above, there is no unreviewed safety question.

Approved: 9/17/90

Unreviewed Safety Question Evaluation #90-118

Subject: LWPS (WL) Evaporator Package

Description: Valves WL-0794, WL-1259, and WL-1260 are to be added to the subject system P&ID for Unit 1. Valve WL-1258 is to be added to the Unit 2 P&ID. These changes are to make the P&ID's agree with the as-built configuration.

Safety Evaluation:

1) Does the subject of this evaluation increase the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report?

Addition of this normally closed high point vent valve WL-0794 and low point drain valves WL-1258, WL-1259 and WL-1260 does not affect the system design basis or operation of the plant because these valves will be used only when venting or draining the line is required which will probably occur only during startup. Therefore, this change does not increase the probability of occurrence of an accident previously evaluated in the UFSAR.

Addition of the normally closed high point vent valve and low point drain valves does not change, degrade, or prevent actions; alter any assumptions or conclusions previously made; or result in any increase in doses for any accident. Therefore, this change does not increase the consequences of an accident previously evaluated in the UFSAR.

Addition of this normally closed high point vent valve and low point drain valves does not affect the system design basis or operation of the plant. This change does not affect operability or functionability of the WL system and does not impact either directly or indirectly any equipment important to safety. Therefore, this change does not increase the probability of occurrence of a malfunction of equipment important to safety previously evaluated in the UFSAR.

These valves are normally closed vent and drain valves and do not impact any equipment important to safety as defined in the UFSAR nor increase the consequences of a malfunction of equipment important to safety previously evaluated in the UFSAR.

Unreviewed Safety Question Evaluation #90-118 (Cont'd)

2) Does the subject of this evaluation create the possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report?

Adding the normally closed vent valve (WL-0794) and drain valves (WL-1258, WL-1259, and WL-1260) does not affect the operation or function of the Liquid Waste Processing System (LWPS) or that of any safety-related system. Should the valves or line fail this event would not create the possibility of an accident of a different type or of a different type of malfunction of equipment important to safety than any previously evaluated in the UFSAR.

3) Does the subject of this evaluation reduce the margin of safety as defined in the basis for any technical specification?

Sections 3/4.11.1.1 thru 3/4.11.1.4 of the Technical Specifications do not discuss or refer to use of high point vent valves or low point drain valves. Vent and drain valves are not governed by the Technical Specification for the LWPS. The operational and functional requirements of the LWPS are not changed by addition of these valves. Therefore, this change does not reduce the margin of safety as defined in the basis for any Technical Specification.

Based upon the above, there is no unreviewed safety question.

Approved: 6/12/90

Unreviewed Safety Question Evaluation #90-119

Subject: Coating of Sumps and Basins

Description: This change adds a coating system to the HTDS Containment Basin, Mixed Bed Regeneration Basin, Secondary Sidewater Structure Area, and the Acid/Caustic Basin in Unit 2. A sump with a valved drain line to the Chemical Waste System is added to the Secondary Sidewater Structure Area.

Safety Evaluation:

1) Does the subject of this evaluation increase the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report?

The added sump is located outside Category I buildings in a nonsafety-related structure and does not affect any safety-related system. The drain line of the sump ties into the Chemical Waste System. The sumps or the Chemical Waste System are not modeled as part of the accident/transient analyses. Thus, the subject of this evaluation does not increase the probability of occurrence of an accident as previously evaluated in the SAR.

Since the sump is utilized to collect any Acid/Caustic solutions that may be spilled, it mitigates accidents involving these solutions. The dose is unchanged. Thus, the subject of this evaluation does not increase the consequences of an accident previously evaluated in the SAR.

Since the sump is located outside Category I buildings in a nonsafety-related structure it does not affect safety-related systems. The purpose of the coating is to increase the service life of the subject basins/sumps. Thus, the subject of this evaluation does not increase the probability of occurrence of a malfunction of equipment important to safety previously evaluated in the SAR.

Since the sump is located outside Category I buildings in a nonsafety-related structure, it does not affect safety-related systems and is not designated as equipment important to safety. Thus, the subject of this evaluation does not increase the consequences of a malfunction of equipment important to safety previously evaluated in the SAR.

Unreviewed Safety Question Evaluation #90-119 (Cont'd)

2) Does the subject of this evaluation create the possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report?

Since the sump is located outside Category I Buildings in a nonsafety-related structure, it does not affect safety-related systems or components and is not designated as equipment important to safety. Since the sump is utilized to collect any Acid/Caustic solutions that may be spilled, it mitigates accidents involving these solutions. Thus, the subject of this evaluation does not create the possibility of an accident of a different type or of a different type of malfunction of equipment important to safety than any previously evaluated in the SAR.

3) Does the subject of this evaluation reduce the margin of safety as defined in the basis for any technical specification?

Addition of a sump and drain line to the Chemical Waste System is not covered by any Technical Specifications. Thus, the subject of this evaluation does not reduce the margin of safety as defined in the basis for any Technical Specification.

Based upon the above, there is no unreviewed safety question.

Approved: 6/06/90

Unreviewed Safety Question Evaluation #90-120

Subject: Essential Cooling Water (ECW) System Screen Wash Booster Pump

Description: Installation of a jumper in the control circuit allows start and auto-start of the booster pump without use of interposing relay 42X.

Safety Evaluation:

1) Does the subject of this evaluation increase the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report?

   Control functions, including auto-start features, remain in effect. Therefore, this temporary modification does not increase the probability of loss of ECW. Since the ECW system will function as before to cool ESF components, there is no increase in the consequences of an accident previously evaluated in the SAR. Electrical loads will be similar after the modification to those before; therefore, there will be no increase in the probability of occurrence of a malfunction of the screen wash booster pump, and no increase in the probability of malfunction of equipment important to safety evaluated in the SAR.

   Since this temporary modification does not modify the control logic for the booster pump, it does not increase the consequences of a malfunction of equipment important to safety evaluated in the SAR.

2) Does the subject of this evaluation create the possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report?

   Since no new equipment is added, and all equipment will actuate and control as previously evaluated, this change will not create an accident of a different type, nor create the possibility of a different type of malfunction than any previously evaluated in the SAR.

Unreviewed Safety Question Evaluation #90-120 (Cont'd)

3) Does the subject of this evaluation reduce the margin of safety as defined in the basis for any technical specification?

Since the ECW system will function in a manner identical to that before the temporary modification, this temporary modification will have no effect on the basis in the Technical Specification.

Based upon the above, there is no unreviewed safety question.

Approved: 6/1/90

Unreviewed Safety Question Evaluation #90-121

Subject: Closed Loop Auxiliary Cooling Water (AC) System

Description: The subject system P&ID is to be changed to reflect the as-built configuration and provide consistency between documents.

Safety Evaluation:

1) Does the subject of this evaluation increase the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report?

No accidents in the AC system are analyzed in the UFSAR. Changing the piping configuration for vacuum relief valve PS-6813 and vent valve AC0144 does not change the vacuum/vent protection for the Auxiliary Cooling Water Surge Tank and does not affect the design bases or operation of the AC system. Therefore, this change does not increase the probability of occurrence of an accident previously evaluated in the UFSAR.

This change does not degrade, or prevent actions; alter any assumptions or conclusions previously made; or result in an increase in doses for any accident. Therefore, this change does not increase the consequences of an accident previously evaluated in the UFSAR.

The new piping configuration reflects the as-built configuration of the plant and is consistent with the Unit 2 piping configuration. It does not affect the operability or functionability of the AC system, and does not impact either directly or indirectly equipment considered important to safety.

Changing the vacuum/vent piping configuration of the AC Surge Water Tank does not affect the design basis or operation of the plant. This change does not impact any equipment important to safety as defined in the UFSAR nor does it increase the consequences of a malfunction of equipment important to safety previously evaluated in the UFSAR.

Unreviewed Safety Question Evaluation #90-121 (Cont'd)

2) Does the subject of this evaluation create the possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report?

Should the valve or line fail (leak or break), this does not create the possibility for an accident of a different type than any previously evaluated in the UFSAR.

Changing the piping configuration to the as-built condition and to be consistent with other design documents does not affect the operability or functionability of the AC system or that of any safety-related system. Should the valves fail, this change would not create the possibility of a different type of accident or malfunction than any evaluated in the UFSAR.

3) Does the subject of this evaluation reduce the margin of safety as defined in the basis for any technical specification?

Section 3/4.7 of the Plant Technical Specifications does not discuss or refer to use of vent/vacuum piping for the AC system. The AC system is not governed by any Technical Specification. Operational and functional requirements of the AC system are not altered by this change. Therefore, this change does not reduce the margin of safety as defined in the basis for any Technical Specification.

Based upon the above, there is no unreviewed safety question.

Approved: 6/25/90

Unreviewed Safety Question Evaluation #90-122

Subject: Feedwater Isolation Valve Bypass Valve Pneumatic Controller

Description: This temporary modification provides for replacing the feedwater isolation bypass valve flow indicating controller with a temporary manual controller. The existing controller is not functional, and its function is required to support plant startup.

Safety Evaluation:

1) Does the subject of this evaluation increase the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report?

   Feedwater containment isolation is evaluated in the UFSAR, but the modification does not affect the ESF fail-safe condition of the valve. The change affects the valve control only in that the operator will manually control the bypass flow to satisfy the 30-minute warm-up interlock for opening the feedwater isolation valve.

2) Does the subject of this evaluation create the possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report?

   The worst case analysis for manually controlling the bypass flow would be for the valve to manually fail open. Hydraulically in parallel and pneumatically in series is a flow switch which causes the isolation bypass valve to close if flow approaches a condition which would cause an excessive line heat-up rate. Also, the ESF train A and B actuation function is independent of the manual control. The high bypass flow interlock is not disabled. The safety function of the valve is not affected.

3) Does the subject of this evaluation reduce the margin of safety as defined in the basis for any technical specification?

   The safety function of the feedwater isolation bypass valve is not changed or affected. Valve stroke times are not affected. Therefore, there is no reduction in the margin of safety as defined in the Technical Specifications.

Based upon the above, there is no unreviewed safety question.

Approved: 6/08/90

Unreviewed Safety Question Evaluation #90-125

Subject: Auxiliary Steam (AS) System

Description: The subject system P&ID is to be revised to change valves AS-0330 and AS-0331 from isolation to drain valves to agree with as-built configuration and design documents.

Safety Evaluation:

1) Does the subject of this evaluation increase the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report?

No accidents in the AS System are analyzed in the UFSAR. Changing valves AS-0330 and AS-0331 from 1-inch globe type isolation valves to normally closed 1-inch globe type drain valves does not affect the system design basis or operation of the plant. This change represents the as-built condition and requires no physical change to the plant. Therefore, this change does not increase the probability of occurrence of an accident previously evaluated in the UFSAR.

This change does not change, degrade, or prevent actions; alter any assumptions or conclusions previously made; or result in any increase in doses for any accident. Therefore, this change does not increase the consequences of an accident previously evaluated in the UFSAR.

This change does not affect the system design basis or operation of the plant. This change does not affect the operability or functionability of the AS system and does not impact either directly or indirectly the probability of occurrence of a malfunction of equipment important to safety previously evaluated in the UFSAR.

This change does not impact any equipment important to safety as defined in the UFSAR, nor does it increase the consequences of a malfunction of equipment important to safety previously evaluated in the UFSAR.

Unreviewed Safety Question Evaluation #90-125 (Cont'd)

2) Does the subject of this evaluation create the possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report?

This change does not affect the AS system operation or function. Components affected by this change are located outside safety-related structures and failure of these components would not impact any safety-related components. Should the valve or line fail (leak or break), this event would not create the possibility of an accident of a different type or of a different type of malfunction of equipment important to safety than any previously evaluated in the UFSAR.

3) Does the subject of this evaluation reduce the margin of safety as defined in the basis for any technical specification?

Sections 3/4.7 and 3/4.3 of the Technical Specifications do not discuss or refer to use of isolation and drain valves for the AS system. The AS system is not governed by any Technical Specification. Operational and functional requirements of the AS system are not altered by this change. Therefore, this change does not reduce the margin of safety as defined in the basis for any Technical Specification.

Based upon the above, there is no unreviewed safety question.

Approved: 6/25/90

Unreviewed Safety Question Evaluation #90-126

Subject: Non-Radioactive Chemical Waste System

Description: Drains and influents to the Non-Radioactive Chemical Waste System basis are to be temporarily rerouted to allow coating of the basin. The lines may be rerouted to either the other side of the basin, or to the organics basin.

Safety Evaluation:

1) Does the subject of this evaluation increase the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report?

The purpose of routing these influents to the Organic Basin is to use the basin for temporary storage. In the event that discharges must be made to the non-radioactive chemical waste system basin and the operable side is full, the water can be transferred to the Organics Basin. Once the operable side has been emptied, the water can be transferred from the Organic Basin to the operable side for processing. All storm drains in the area will be covered to prevent any leakage from entering the storm drains. The lines from one side of the basin to the other will be within the area of the basin so any leakage will be contained by the basin. Flooding that may be caused by these modifications is bounded by the analysis for a Main Cooling Reservoir embankment breach.

The drains from the Sodium Hypochlorite (SH) dilution water softeners will be diverted directly to the Organics Basin. This will not affect the operation of the SH system. A flush line will be connected to the Fresh Water System for flushing the piping to the Organics Basin. This will not affect operation of the fresh water system.

2) Does the subject of this evaluation create the possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report?

See discussion under (1). The affected systems are not safety-related, and there is no change in the overall operation of the affected systems. The change does not create the possibility for an accident or malfunction of equipment important to safety of a different type than any evaluated previously in the safety analysis report.

Unreviewed Safety Question Evaluation #90-126 (Cont'd)

3) Does the subject of this evaluation reduce the margin of safety as defined in the basis for any technical specification?

The organic waste system is not addressed by Technical Specifications. This change does not reduce the margin of safety as defined in the basis for any Technical Specification.

Based upon the above, there is no unreviewed safety question.

Approved: 7/10/90

Unreviewed Safety Question Evaluation #90-127

Subject: EAB Equipment Hatch Openings

Description: Structural steel platforms are to be added over the EAB equipment hatch openings at elevations 35'-0" and 60'-0". These platforms are being provided for personnel safety.

Safety Evaluation:

1) Does the subject of this evaluation increase the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report?

These modifications do not increase the probability of an accident previously evaluated in the SAR because there is no impact on safety-related systems or components. Addition of hoists and the platforms are within the EAB Equipment Hatch which is a non-seismic II/I area; thus, they do not impact any safety-related components. The electrical power supply is taken from a nonsafety distribution panel. None of the changes made by these modifications form the bases of any of the accidents described in UFSAR Chapters 6 and 15.

These modifications do not impact leaktightness requirements since the penetrations are provided with airtight seals. Thus, the margin of safety has not been impacted. The remaining changes made by these modifications do not have any impact on the consequences of an accident previously evaluated in the UFSAR.

These modifications do not increase the probability of occurrence of a malfunction of equipment important to safety as there is no impact to any safety-related system or component. The hoists and platforms are located in a non-seismic II/I area. The combustible loads are not increased by this modification since the cables are routed in conduit. Penetrations through fire barriers are provided with 3-hour fire-rated seals. These modifications do not impact any piping systems; thus, the HELBA/MELBA programs are not impacted. The internal flood analysis is not impacted by covering the Equipment Hatch openings.

These modifications do not increase the consequences of a malfunction of equipment important to safety previously evaluated in the SAR since there is no impact to equipment important to safety.

Unreviewed Safety Question Evaluation #90-127 (Cont'd)

2) Does the subject of this evaluation create the possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report?

These modifications do not create the possibility for an accident of a different type than previously evaluated in the UFSAR since the hoists added by these modifications do not have any safety-related functions. The hoists are for raising and lowering the platforms. Failure of the hoists or platforms will not result in any impact to safety-related components as the entire EAB Equipment Hatch is a non-seismic II/I area.

These modifications do not create the possibility of a different type of malfunction of equipment important to safety than any previously evaluated in the UFSAR since there is no impact to any equipment important to safety.

3) Does the subject of this evaluation reduce the margin of safety as defined in the basis for any technical specification?

These modifications do not reduce the margin of safety as defined in the bases for any Technical Specifications. The only Technical Specification which could be potentially impacted is TS 3/4.7.7 which discusses maintaining the Control Room Envelope at a positive pressure. However, addition of the core drilling through the walls of the EAB does not affect the bases of the Technical Specification as they are sealed with an airtight seal, thus maintaining the integrity of the Control Room Envelope. The remaining changes do not affect the bases of any Technical Specifications since they do not affect any equipment or components which form the bases of the Technical Specifications.

Based upon the above, there is no unreviewed safety question.

Approved: 6/25/90

Unreviewed Safety Question Evaluation #90-128

Subject: Demineralized Water (DW) Prover Tanks

Description: The subject system P&ID is to be revised by changing the valve type designation for DW 0009 from a gate valve to globe valve. This change is for consistency with the as-built configuration and other design documents.

Safety Evaluation:

1) Does the subject of this evaluation increase the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report?

No accidents are analyzed in the UFSAR for the DW system. Revising the P&ID to show the correct valve type, from normally open gate to normally open globe valve, does not affect the system design basis or operation of the plant. Therefore, this change does not increase the probability of occurrence of an accident previously evaluated in the UFSAR.

Changing the valve type from gate to globe does not change, degrade, or prevent actions; alter any assumptions or conclusions previously made; or result in the increase of doses for any accident because correcting the valve type does not change the operation of the system. Therefore, this change does not increase the consequences of an accident previously evaluated in the UFSAR.

This change does not affect operability or functionability of the DW system and does not impact either directly or indirectly any equipment considered important to safety because this is a drawing correction only and the system is physically unchanged. Therefore, this change does not increase the probability of occurrence of a malfunction of equipment important to safety previously evaluated in the UFSAR.

This change does not impact any equipment important to safety as defined in the UFSAR nor does it increase the consequences of a malfunction of equipment important to safety previously evaluated in the UFSAR.

Unreviewed Safety Question Evaluation #90-128 (Cont'd)

2) Does the subject of this evaluation create the possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report?

Correcting the valve type does not affect the system operation or function. The component affected by this change is located outside safety-related structure boundaries and failure of this component would not impact any safety-related components. Should the line fail, this event would not create the possibility for an accident of a different type or a different type of malfunction of equipment important to safety than any previously evaluated in the UFSAR.

3) Does the subject of this evaluation reduce the margin of safety as defined in the basis for any technical specification?

As per review of Technical Specification 3/4.7, there are no Technical Specifications which discuss the DW system and the valves in the DW system are not governed by the Technical Specifications. Operational and functional requirements of the DW system are not changed by changing the P&ID to reflect the correct valve type. Therefore, this change does not reduce the margin of safety as defined in the basis for any Technical Specification.

Based upon the above, there is no unreviewed safety question.

Approved: 6/29/90

Unreviewed Safety Question Evaluation #90-129

Subject: Turbine Gland Seal (GS) System

Description: This change to the subject system P&ID adds a 4" x 2" reducer to the 4" RCSG8 upstream of 2" Y-strainer to reflect the as-built configuration.

Safety Evaluation:

1) Does the subject of this evaluation increase the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report?

No accidents in the GS System are analyzed in the UFSAR. Showing the 4" x 2" reducer in line 4"RCSG8 as shown on the vendor (Westinghouse) drawing does not affect the system design basis or operation of the plant. This change represents the as-built condition and requires no physical change to the plant. Therefore, this change does not increase the probability of occurrence of an accident previously evaluated in the UFSAR.

This change does not change, degrade, or prevent actions; alter any assumptions or conclusions previously made; or result in any increase in doses for any accident. Therefore, this change does not increase the consequences of an accident previously evaluated in the UFSAR.

This change does not affect the system design basis or operation of the plant. This change does not affect the operability or functionability of the GS system and does not impact either directly or indirectly the probability of occurrence of a malfunction of equipment important to safety previously evaluated in the UFSAR.

This change does not impact any equipment important to safety as defined in the UFSAR, nor does it increase the consequences of a malfunction of equipment important to safety previously evaluated in the UFSAR.

Unreviewed Safety Question Evaluation #90-129 (Cont'd)

2) Does the subject of this evaluation create the possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report?

This change does not affect the GS system operation or function. The component affected by this change is located inside the TGB and the effects of a failure of this component would be confined to the TGB which is not a safety-related structure. Should the reducer or line fail (leak or break), this event would not create the possibility of an accident of a different type or of a different type of malfunction of equipment important to safety than any previously evaluated in the UFSAR.

3) Does the subject of this evaluation reduce the margin of safety as defined in the basis for any technical specification?

Section 3/4.7 of the Technical Specifications does not discuss or refer to the use of reducers for the GS system. The GS system is not governed by any Technical Specification. The operational and functional requirements of the GS system are not altered by this change. Therefore, this change does not reduce the margin of safety as defined in the basis for any Technical Specification.

Based upon the above, there is no unreviewed safety question.

Approved: 6/29/90

Unreviewed Safety Question Evaluation #90-130

Subject: 1989 Geotechnical UFSAR Update

Description: The UFSAR is to be updated to include data from geotechnical monitoring through 1989.

Safety Evaluation:

1) Does the subject of this evaluation increase the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report?

   All new measurements reported in this update fall within design criteria. The potential for an accident or the consequences of an accident is not impacted by these reported conditions.

   Differential settlement, building tilt, subsidence and changes in piezometric level are all below allowable levels. The conditions described in this update have been evaluated and the probability or consequences of an accident are not affected.

2) Does the subject of this evaluation create the possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report?

   Movements and changes in water levels are within expected limits. This update does not describe changes that would lead to an accident of a different type than evaluated in the UFSAR.

   Movements measured and reported in the subject update are all within the design limits of the equipment. These movements have been evaluated. The potential for a different type of malfunction does not exist.

3) Does the subject of this evaluation reduce the margin of safety as defined in the basis for any technical specification?

   None of the Technical Specifications are based on limits of building settlement or piezometric level. Since the measurements reported in the subject update are within evaluated limits, there is no impact on equipment that might be referenced in the Technical Specifications.

Based upon the above, there is no unreviewed safety question.

Approved: 6/29/90

Unreviewed Safety Question Evaluation #90-131

Subject: Auxiliary Feedwater (AFW) System

Description: The P&ID for the subject system is to be revised to add a 1-1/2" flange to line 1-1/2" AF1053GA3 to reflect as-built conditions and for consistency with other design documents.

Safety Evaluation:

1) Does the subject of this evaluation increase the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report?

Causes and analysis for conditions which require use of the AFW system, including loss of coolant from small breaks, are discussed in Chapter 15 of the UFSAR. This change does not affect this analysis. A flange is being added by this change to a safety class line (safety class 3) to allow removal of Auxiliary Feedwater Pump P-14. Adding the flange to the line does not affect the system design basis or operation of the plant because the function of the system has not changed. Adding this flange to the line has no adverse impact on the stresses and nozzle loads as indicated in stress calculation RC-8322. Therefore, this change does not increase the probability of occurrence of an accident previously evaluated in the UFSAR.

This P&ID change does not change, degrade, or prevent actions; alter any assumptions or conclusions previously made; or result in any increase in accident doses for any accident because the function of the line and the system is unchanged. Therefore, this change does not increase the consequences of an accident previously evaluated in the UFSAR.

This P&ID change does not affect the system design basis or operation of the plant. This change does not affect operability or functionability of the AFW system because adding this flange to the line does not affect the function of the line or the system. This change does not impact either directly or indirectly any equipment important to safety. Therefore, this change does not increase the probability of occurrence or consequences of a malfunction of equipment important to safety previously evaluated in the UFSAR.

Unreviewed Safety Question Evaluation #90-131 (Cont'd)

2) Does the subject of this evaluation create the possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report?

This change does not affect the operability and functionability of the AFW system or that of any other safety-related system. The component affected by this change is located inside the isolation valve cubicle (IVC) which is a safety-related structure. The effects of a failure would be confined to the IVC. Should the flange fail (leak or break), it would not create the possibility of a different type of an accident or malfunction of equipment important to safety than previously evaluated in the UFSAR.

3) Does the subject of this evaluation reduce the margin of safety as defined in the basis for any technical specification?

Technical Specification 3/4.7.1.2 does not discuss or refer to the use of flanges for the AFW system. Operational and functional requirements of the AFW system are not changed by this P&ID change. Therefore, this change does not reduce the margin of safety as defined in the basis for any Technical Specification.

Based upon the above, there is no unreviewed safety question.

Approved: 6/29/90

Unreviewed Safety Question Evaluation #90-132

Subject: CVCS Letdown Flow HI Alarm Setpoint Change

Description: This change revises the HI alarm setpoint for the CVCS Letdown Flow to be 30 gpm over the maximum achievable flow. The Main Control Room (CR), Auxiliary Shutdown Panel (ASP) and Transfer Switch Panels (TSP) respective nameplates are to be revised to provide a more accurate flow rating for each Letdown Orifice Isolation Valve.

Safety Evaluation:

1) Does the subject of this evaluation increase the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report?

The subject of this evaluation does not increase the probability of occurrence of an accident since this change only provides a more conservative setpoint for an "Unusual High Flow" condition in the letdown system and a better defined flow rating for each isolation valve that is meaningful to the plant operator.

The nameplate flow rating for the orifice isolation valves provides the operator with an easier method of identification for operation of the respective valves to achieve the desired flow condition. The proposed changes are more conservative and will better assist operators during operations. No consequences of an accident previously evaluated are increased by the proposed change.

The subject of this evaluation does not increase the probability of occurrence of a malfunction of equipment important to safety since providing a more conservative setpoint only enhances operator response and, by revising the flow rating, the change provides a value that is more meaningful to operators.

The subject of this evaluation does not increase the consequences of a malfunction of equipment important to safety since the principal purpose of a HI alarm setpoint for letdown flow is to alert the operator that an unusual flow condition exists; a more conservative setpoint only enhances the system for operator response.

Unreviewed Safety Question Evaluation #90-132 (Cont'd)

2) Does the subject of this evaluation create the possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report?

The subject of this evaluation does not create the possibility of an accident of a different type or a different type of malfunction of equipment important to safety than any previously evaluated in the SAR since this change only provides a more conservative setpoint for an "Unusual High Flow" condition in the letdown system and a better defined flow rating for each isolation valve that is meaningful to the plant operator.

3) Does the subject of this evaluation reduce the margin of safety as defined in the basis for any technical specification?

Neither the setpoint value for the Letdown HI Flow Alarm, nor the Letdown Orifice Isolation Valves flow ratings are considered as factors for the basis of related Tech. Specs. The proposed changes are more conservative and will better assist operators during operations. Therefore, the proposed change does not reduce the margin of safety.

Based upon the above, there is no unreviewed safety question.

Approved: 8/09/90

Unreviewed Safety Question Evaluation #90-133

Subject: Spent Fuel Pool Cooling and Cleanup System

Description: The refueling cavity filtration system removable spool pieces were shown incorrectly on the subject system P&ID's. These spool pieces are to be completely removed from the system during operational modes 1-5 to agree with the SAR and the design basis analysis.

Safety Evaluation:

1. Does the subject of this evaluation increase the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report?

   The probability of an accident previously evaluated in the SAR is not increased by removal of the spent fuel pool filtration system removable spool pieces during operations. The probability of pipe breaks within containment is unchanged by removal of these spool pieces during operations. The probability of a loss of refueling pool inventory is unchanged by requiring these spool pieces to be installed during refueling operations.

   The consequences of previously evaluated accidents is unchanged by the subject changes. The ability to mitigate the consequences of pipe breaks within the primary containment is unchanged by removal of the filtration system spool pieces during operations. Therefore, the consequences of an accident will be unchanged.

   The probability of ECCS pump failure due to inadequate NPSH is reduced by the subject changes. The proposed change does not affect conditions or bases assumed in the SAR or safety-related functions of equipment/systems since removal of the spool pieces complies with the text of the SAR and the design basis analysis.

   Requiring removal of the spool pieces during operations and installation during refueling has no impact on the consequences of a malfunction of equipment important to safety. The consequences of ECCS or Containment Spray pump failure are not increased by this change. This change ensures that adequate NPSH for these pumps is available to prevent failure.

Unreviewed Safety Question Evaluation #90-133 (Cont'd)

2) Does the subject of this evaluation create the possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report?

The possibility of containment flooding has been evaluated previously and is unchanged by requiring that the removable spool pieces be removed during modes 1-5 and installed during refueling operations. Requiring these spool pieces to be removed during normal operations has no impact on operation of any equipment or system. The subject change can not result in malfunction of any equipment since the spool pieces will be in the proper position for all operational modes.

3) Does the subject of this evaluation reduce the margin of safety as defined in the basis for any technical specification?

The margin of safety as defined for the ECCS and CS pumps is provided by having capacity in excess of the required capacity. This margin is maintained by maximizing the available NPSH to the ECCS pumps as a result of reducing the volume of reactor coolant lost due to entrapment.

Based upon the above, there is no unreviewed safety question.

Approved: 8/09/90

Unreviewed Safety Question Evaluation #90-134

Subject: Dual Tower Hydrogen Dryer Purifier

Description: This modification adds a Dual Tower Hydrogen Dryer/Purifier Skid to the existing Main Turbine Generator System. The new Dual Tower Hydrogen Dryer/Purifier Skid will be located in the Turbine Generator Building and in close proximity of the existing Single Tower Hydrogen Dryer.

Safety Evaluation:

1) Does the subject of this evaluation increase the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report?

   Addition of the Dual Tower Hydrogen Dryer/Purifier Skid to the nonsafety-related Main Turbine Generator System does not increase the probability or the consequences of an accident previously evaluated in the Safety Analysis Report, nor does it increase the probability of occurrence of a malfunction or the consequences of a malfunction of equipment important to safety previously evaluated in the Safety Analysis Report.

2) Does the subject of this evaluation create the possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report?

   Addition of the Dual Tower Hydrogen Dryer/Purifier Skid to the nonsafety-related Main Turbine Generator System does not increase the possibility of an accident of a different type or the possibility of a malfunction of equipment important to safety than previously evaluated in the Safety Analysis Report.

3) Does the subject of this evaluation reduce the margin of safety as defined in the basis for any technical specification?

   Addition of the Dual Tower Hydrogen Dryer/Purifier Skid to the nonsafety-related Main Turbine Generator System will not reduce the margin of safety as defined in the basis of the Technical Specifications because the Hydrogen System is not governed by the Technical Specifications.

Based upon the above, there is no unreviewed safety question.

Approved: 7/10/90

Unreviewed Safety Question Evaluation #90-136

Subject: Post-Accident Radiation Drawings

Description: This change is being performed to incorporate the results of design calculations into the subject drawings.

Safety Evaluation:

1) Does the subject of this evaluation increase the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report?

The proposed changes do not involve physical modifications to the facility. The revised radiation drawings may be used in the development of EOP actions; however, this change will not modify safety-related or important to safety equipment. The systems, components, and equipment of the facility will continue to operate as designed. In addition, revisions to the current drawings will provide more accurate information to allow reactor operators to make intelligent and safe choices in response to an accident. Therefore, the proposed changes do not increase the probability of occurrence or the consequences of an accident or malfunction of equipment that is important to safety previously analyzed in the STPEGS UFSAR.

2) Does the subject of this evaluation create the possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report?

The as-modified radiation drawings represent the results of a more accurate design calculation for the particular areas evaluated. The proposed changes will not cause any modifications to the physical design of the facility. The current EOPs can be performed for actions in the affected areas. As a result, the evaluations and analyses which rely upon these EOP actions are shown to be valid. Therefore, the proposed changes do not create the possibility of an accident or a malfunction of equipment important to safety that has not been previously analyzed in the STPEGS UFSAR.

Unreviewed Safety Question Evaluation #90-136 (Cont'd)

3) Does the subject of this evaluation reduce the margin of safety as defined in the basis for any technical specification?

The Technical Specifications do not govern the radiation dose rates in the areas of concern. Each of the proposed changes corrects a radiation zone drawing to show that the radiation dose rates in the areas evaluated are lower than previously reported. As such, EOPs which require local actions in the areas affected can be performed as written. Therefore, the proposed changes show that the current margin of operational safety is actually greater than previously reported. However, the proposed changes do not recommend any change (and do not cause any change) in the margin of safety as defined in the bases for the Technical Specifications.

Based upon the above, there is no unreviewed safety question.

Approved: 7/10/90

Unreviewed Safety Question Evaluation #90-137

Subject: Gaseous Waste Processing System

Description: The subject system P&ID is to be revised to add valve tag number WG-0151 to match installation drawings and the valve list.

Safety Evaluation:

1) Does the subject of this evaluation increase the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report?

   The GWPS does not perform a safety function. Failure of this system does not compromise any safety-related system nor prevent safe shutdown of the plant. The valve associated with this evaluation performs no safety function nor does it compromise any safety-related system or prevent a safe shutdown of the plant. Failure of this valve would be bounded by the worst case uncontrolled radioactive release due to rupture of the volume control tank. The subject of this evaluation does not increase the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the SAR.

2) Does the subject of this evaluation create the possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report?

   See discussion under (1). This change does not affect the possibility of an accident or malfunction.

3) Does the subject of this evaluation reduce the margin of safety as defined in the basis for any technical specification?

   The Technical Specifications do not contain a pertinent margin of safety for the valves associated with this change. Therefore, the margin of safety as defined in the basis for the Technical Specification is not reduced.

Based upon the above, there is no unreviewed safety question.

Approved: 7/10/90

Unreviewed Safety Question Evaluation #90-138

Subject: Liquid Waste Processing System (LWPS)

Description: The subject system P&ID is to be revised to correct the symbol for the valve actuator on valve WL-PV-4054A to match the control valve data sheet and the as-built condition.

Safety Evaluation:

1) Does the subject of this evaluation increase the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report?

   The subject of this evaluation does not increase the probability of occurrence of an accident as evaluated in the SAR. Since the safety analysis is based on this actuator performing its intended function of failing closed and the pneumatic vane actuator is an acceptable actuator for the intended application, this change does not adversely affect the safety analysis probability of an accident.

   The LWPS does not perform a safety function other than Reactor Containment Building (RCB) Isolation. Failure of the remaining portion of the system does not compromise any safety-related system nor prevent safe shutdown of the plant. Since the valve associated in this evaluation is not used for containment isolation, it performs no safety function nor can it compromise any safety-related system or prevent a safe shutdown of the plant.

2) Does the subject of this evaluation create the possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report?

   See discussion under (1). The change does not affect the possibility of an accident or malfunction.

3) Does the subject of this evaluation reduce the margin of safety as defined in the basis for any technical specification?

   The Technical Specification does not go into the level of detail to include the valve being affected by this change. Therefore, the margin of safety as defined in the basis for the Technical Specification is not reduced.

Based upon the above, there is no unreviewed safety question.

Approved: 7/10/90

Unreviewed Safety Question Evaluation #90-139

Subject: Liquid Waste Processing System (LWPS)

Description: The subject system P&ID is to be revised to correct the P&ID symbol for the valve actuator on valve WL-PV-4004A. This correction is to match the control valve data sheet and for consistency with the as-built condition.

Safety Evaluation:

1) Does the subject of this evaluation increase the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report?

   The subject of this evaluation does not increase the probability of occurrence or consequences of an accident as evaluated in the SAR. This change does not impact (1) the LWPS design basis of SAR Section 11.2.1, (2) the LWPS equipment fault design requirements of SAR Section 11.2.2.3.2, or (3) the LWPS expected radioactive release evaluation as described in SAR Section 11.2.3. The valve performs no safety function nor does it compromise any safety-related system or prevent a safe shutdown of the plant.

2) Does the subject of this evaluation create the possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report?

   See discussion under (1). This change does not affect the possibility of an accident or malfunction.

3) Does the subject of this evaluation reduce the margin of safety as defined in the basis for any technical specification?

   The Technical Specifications do not contain a pertinent margin of safety for the valves associated with this change. Therefore, the margin of safety as defined in the basis for the Technical Specification is not reduced.

Based upon the above, there is no unreviewed safety question.

Approved: 7/10/90

Unreviewed Safety Question Evaluation #90-140

Subject: Heater Drips System

Description: The subject P&ID is to be revised to add vent valve HD-0660 and associated piping to conform to the as-built configuration.

Safety Evaluation:

1) Does the subject of this evaluation increase the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report?

   The Heater Drips (HD) System is not safety-related and failure of this system will have no adverse affect on any safety-related systems or components. Existence of a normally closed, high point vent valve in the non-safety, non-safe shutdown-related HD system will not increase the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the Safety Analysis Report.

2) Does the subject of this evaluation create the possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report?

   Based on the above discussion, the existence of a normally closed, high point vent valve in the non-safety, non-safe shutdown related HD system will not create the possibility for an accident or a malfunction of a different type than any evaluated previously in the Safety Analysis Report.

3) Does the subject of this evaluation reduce the margin of safety as defined in the basis for any technical specification?

   The Heater Drips System is not discussed in the Technical Specifications; therefore, this change does not reduce the margin of safety as defined in the basis for any Technical Specification.

Based upon the above, there is no unreviewed safety question.

Approved: 7/10/90

Unreviewed Safety Question Evaluation #90-141

Subject: Auxiliary Feedwater Storage Tank (AFWST)

Description: This evaluation addresses a change in the STPEGS response to 10CFR50.63, "Loss of All Alternating Current Power." The AFWST makeup setpoint is being reduced from 50%.

Safety Evaluation:

1) Does the subject of this evaluation increase the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report?

   The changes made to HL&P's response to 10CFR50.63 do not increase the probability of any accident or increase the consequences of any malfunction of equipment as described in the UFSAR because the new setpoint provides sufficient time before makeup is required. These changes also do not deviate from the guidance provided in NUMARC 87-00 "Guidelines and Technical Bases for NUMARC Initiatives Addressing Station Blackout at Light Water Reactors".

2) Does the subject of this evaluation create the possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report?

   See discussion under (1). The change does not create the possibility for an accident or malfunction of equipment important to safety of a different type than any evaluated previously in the safety analysis report.

3) Does the subject of this evaluation reduce the margin of safety as defined in the basis for any technical specification?

   See discussion under (1). There is no reduction in the margin of safety as defined in the basis for any Technical Specification.

Based upon the above, there is no unreviewed safety question.

Approved: 7/10/90

Unreviewed Safety Question Evaluation #90-144

Subject: Open Loop Auxiliary Cooling Water System

Description: The subject system P&ID is to be revised to show exciter vent valves terminating in a common drain trough in lieu of individual caps. This change is for agreement with the as-built configuration.

Safety Evaluation:

1) Does the subject of this evaluation increase the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report?

No accidents in the subject system are analyzed in the UFSAR. Revising the P&ID does not affect the system design basis or operation of the plant because venting of each individual line can still be accomplished. Therefore, this change does not increase the probability of occurrence of an accident previously evaluated in the UFSAR.

This change does not change, degrade, or prevent actions; alter any assumptions or conclusions previously made; or result in any increase in accident doses for any accident. Therefore, this change does not increase the consequences of an accident previously evaluated in the UFSAR.

This change does not affect the system design basis or operation of the plant. This change does not affect the operability or functionability of the system and does not impact either directly or indirectly the probability of occurrence of a malfunction of equipment important to safety previously evaluated in the USFAR.

These valves are normally closed vent valves and do not impact any important to safety equipment as defined in the UFSAR, nor do they increase the consequences of a malfunction of equipment important to safety previously evaluated in the UFSAR.

2) Does the subject of this evaluation create the possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report?

This change does not affect the system operation or function. Should the valves or line fail (leak or break), this event would not create the possibility of an accident of a different type than any previously evaluated in the UFSAR.

Unreviewed Safety Question Evaluation #90-144 (Cont'd)

This change does not affect the operability and functionability of the system or that of any safety-related system. Should the valves fail, this event would not create the possibility of a different type of malfunction of equipment important to safety than previously evaluated in the UFSAR.

3) Does the subject of this evaluation reduce the margin of safety as defined in the basis for any technical specification?

Section 3/4.7 of the Technical Specifications does not discuss or refer to the routine of vent valves for the OC system. The subject system is not governed by any Technical Specification. Operational and functional requirements of the system are not altered by this change. Therefore, this change does not reduce the margin of safety as defined in the basis for any Technical Specification.

Based upon the above, there is no unreviewed safety question.

Approved: 8/09/90

Unreviewed Safety Question Evaluation #90-145

Subject: HVAC TSC Chilled Water (CH) System

Description: The subject system P&ID for Unit 1 is to be revised to delete notation "Fail Open" for motor-operated valves MOV-9617, 9618, 9771, 9772, 9786, and 9787. This is for consistency with motor-operated valve characteristic to "fail as is."

Safety Evaluation:

1) Does the subject of this evaluation increase the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report?

No accidents are analyzed in the UFSAR for the HVAC TSC Chilled Water System (CH). Deleting "fail open" designation for these motor-operated valves does not affect the system design basis or operation of the plant, because MOV's fail "as is". This change reflects the as-built condition and is consistent with Unit 2 P&ID which shows the correct failure mode. Therefore, this change does not increase the probability of occurrence of an accident previously evaluated in the UFSAR.

Changing the failure mode designation does not change, degrade, or prevent actions; or result in the increase of accident doses for any accident because correcting the valves to read "fail as is" does not change the operation of the system. Therefore, this change does not increase the consequences of an accident previously evaluated in the UFSAR.

Correcting the valve failure mode does not affect the system design basis or operation of the plant. This change does not affect operability or functionability of the HVAC TSC Chilled Water System and does not impact either directly or indirectly any equipment considered important to safety. Therefore, this change does not increase the probability of occurrence of a malfunction of equipment important to safety previously evaluated in the UFSAR.

This change does not impact any equipment important to safety as defined in the UFSAR nor does it increase the consequences of a malfunction of equipment important to safety previously evaluated in the UFSAR. The TSC CH system is not safety-related and the UFSAR does not have a FEMA for this system.

Unreviewed Safety Question Evaluation #90-145 (Cont'd)

2) Does the subject of this evaluation create the possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report?

Correcting the valve failure mode does not affect the system operation or function. Components affected by this change are located outside safety-related structures and failure of these components would not impact safety-related components. Should the line fail, this event would not create the possibility of an accident of a different type than any previously evaluated in the UFSAR.

Correcting the valve failure mode does not affect operability or functionability of the HVAC TSC Chilled Water System or that of any safety-related system. Should the line fail, this event would not create the possibility of a different type of malfunction of equipment important to safety than previously evaluated in the UFSAR.

3) Does the subject of this evaluation reduce the margin of safety as defined in the basis for any technical specification?

Section 3/4.7.13 of the Technical Specifications does not discuss or refer to the use of motor-operated valves in the HVAC TSC Chilled Water System. Operational and functional requirements of the HVAC TSC Chilled Water System are not changed by changing the P&ID to reflect the correct valve failure mode. Therefore, this change does not reduce the margin of safety as defined in the basis for any Technical Specification.

Based upon the above, there is no unreviewed safety question.

Approved: 7/20/90

Unreviewed Safety Question Evaluation #90-147

Subject: Spent Fuel Pool Cooling and Cleanup System

Description: The subject system P&ID is to be revised to change valve FC0079 from a normally closed ball valve to a normally closed globe valve to agree with the as-built configuration.

Safety Evaluation:

1) Does the subject of this evaluation increase the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report?

   No accidents in the subject system are analyzed in the UFSAR. Changing vent valve FC-0079 from normally closed ball to normally closed globe type does not affect the system design basis or operation of the plant because this valve is normally closed and will be used only when venting of the line is needed. Therefore this change does not increase the probability of occurrence of an accident previously evaluated in the UFSAR.

   Changing the valve type does not change, degrade, or prevent actions; alter any assumptions or conclusions previously made; or result in an increase in accident doses for an accident. Therefore, this change does not increase the consequences of an accident previously evaluated in the UFSAR.

   Changing the valve type does not affect the system design basis or operation of the plant. This change does not affect the operability or functionability of the system and does not impact either directly or indirectly the probability of occurrence of a malfunction of equipment important to safety previously evaluate in the UFSAR.

   This valve is normally closed and does not impact any equipment important to safety as defined in the UFSAR, nor does it increase the consequences of a malfunction of equipment important to safety previously evaluated in the USFAR.

2) Does the subject of this evaluation create the possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report?

   This change does not affect system operation or function. Should the valve or line fail, this event would not create the possibility of an accident of a different type than any previously evaluated in the UFSAR.

Unreviewed Safety Question Evaluation #90-147 (Cont'd)

This change does not affect the operability and functionability of the system or that of any safety-related system. Should the valve fail, this event would not create the possibility of a different type of malfunction of equipment important to safety than previously evaluated in the UFSAR.

3) Does the subject of this evaluation reduce the margin of safety as defined in the basis for any technical specification?

Section 3/4.9.11 of the Technical Specifications does not discuss or refer to the use of vent valves for the system. Use of vent valves is not governed by any Technical Specification. Operational and functional requirements of the system are not altered by this change. Therefore, this change does not reduce the margin of safety as defined in the basis for any Technical Specification.

Based upon the above, there is no unreviewed safety question.

Approved: 7/20/90

Unreviewed Safety Question Evaluation #90-148

Subject: Temporary Seal Water Header

Description: A temporary seal water header is to be provided to supply both Unit 1 and 2 Circulating Water System (CW) and Open Loop Auxiliary Cooling System (OC) to allow for operation of equipment while cleaning/maintenance is done on the permanent Seal Water and Primary System (LW) Leader.

Safety Evaluation:

1) Does the subject of this evaluation increase the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report?

   The CW, OC, or LW systems perform no safety-related function. Failure of these systems does not prevent safe shutdown of the reactor, or affect any safety analysis performed. This change does not increase the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report.

2) Does the subject of this evaluation create the possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report?

   These systems perform no safety functions. Loss of any of these systems does not prevent safe shutdown of the reactor. The change does not create the possibility for an accident or malfunction of equipment important to safety of a different type than any evaluated previously in the safety analysis report.

3) Does the subject of this evaluation reduce the margin of safety as defined in the basis for any technical specification?

   The subject systems are not governed by any Technical Specifications. The change does not reduce the margin of safety as defined in the basis for any Technical Specification.

Based upon the above, there is no unreviewed safety question.

Approved: 7/26/90

Unreviewed Safety Question Evaluation #90-149

Subject: Liquid Waste Processing System

Description: The subject system P&ID is to be revised to correct the symbol for the valve actuator on valves WL-FV-4306, 4306A, and 4314 from pneumatic diaphragm to pneumatic piston to reflect the as-built configuration.

Safety Evaluation:

1) Does the subject of this evaluation increase the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report?

   The subject of this evaluation does not increase the probability of occurrence of an accident as evaluated in the SAR. Since the safety analysis is based on these actuators performing their intended function of failing closed and the pneumatic piston actuator is an acceptable actuator for the intended application, this change does not adversely affect the safety analysis probability of an accident.

   The valves associated with this evaluation are not used for containment isolation, perform no safety function nor do they compromise any safety-related system or prevent a safety shutdown of the plant.

2) Does the subject of this evaluation create the possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report?

   Because the valves perform no safety function, successful operation or failure of these valves would not have been used as a basis for plant safety or safe shutdown. Correction of the P&ID symbol for the valve actuators would not affect any previous accident analysis evaluated in the SAR.

3) Does the subject of this evaluation reduce the margin of safety as defined in the basis for any technical specification?

   The Technical Specifications do not go into the level of detail to include the valves being affected by this change. Therefore, the margin of safety as defined in the basis for the Technical Specification is not reduced.

Based upon the above, there is no unreviewed safety question.

Approved: 7/20/90

Unreviewed Safety Question Evaluation #90-152

Subject: Large and Small Break LOCAs

Description: These changes identify the LBLOCA Peak Clad Temperature (PCT) penalties associated with changes to the BART computer code. The changes also identify the SBLOCA PCT penalties associated with the NOTRUMP computer code changes and changes to the auxiliary feedwater switchover time.

Safety Evaluation:

1) Does the subject of this evaluation increase the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report?

The proposed change revises the reported PCT values for LBLOCA and SBLOCA in the UFSAR. No operator actions or hardware are required or deleted by this change. The results of this change are bounded by the design limits of the plant. Therefore, the proposed change does not increase the probability of an accident previously evaluated in the SAR.

The results of this change are less than the 10CFR50.46 acceptance limit of 2200°F. There is no increase in fuel failure or dose. Therefore, the proposed change does not increase the consequences of an accident previously evaluated in the SAR.

The increased PCT resulting in the proposed change is less than the acceptance limit. Since the acceptance limit is satisfied, there is no increase in fuel failure or dose. Since there is no increase in dose, equipment qualification is not impacted. Therefore, the proposed change does not increase the probability of occurrence, or consequences of malfunction of equipment important to safety evaluated in the SAR.

2) Does the subject of this evaluation create the possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report?

The proposed change revises the reported PCT values for LBLOCA and SBLOCA in the UFSAR. The results of this change are less than the acceptance limit. No physical plant changes are proposed. Therefore, the proposed change does not create the possibility of a different type of an accident or malfunction of equipment important to safety than any previously evaluated in the SAR.

Unreviewed Safety Question Evaluation #90-152 (Cont'd)

.) Does the subject of this evaluation reduce the margin of safety as defined in the basis for any technical specification?

The margin of safety is defined as the difference between the failure point and the acceptance limit. The revised PCT for both the LBLOCA and the SBLOCA is less than the 10CFR50.46 acceptance limit of 2200°F. Therefore, the proposed change does not reduce the margin of safety as defined in the basis for any Technical Specification.

Based upon the above, there is no unreviewed safety question.

Approved: 8/09/90

Unreviewed Safety Question Evaluation #90-153

Subject: Fire Protection Lines and Communications Duct Bank to Nuclear Support Center

Description: This modification is to provide the Fire Protection Pipe Lines necessary to provide water for the Fire Suppression System of the Nuclear Support Center. It is also to provide for installation of the Telecommunications Cable Duct Banks, which are required for future installation of the Telecommunication Cables, to the Nuclear Support Center.

Safety Evaluation:

1) Does the subject of this evaluation increase the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report?

   Addition of the two 8" fire protection lines and Non-Class 1E duct bank to the Nuclear Support Center will not increase the probability of occurrence or increase the consequences of an accident previously evaluated in the FSAR, nor will the addition increase the probability of occurrence of a malfunction or the consequences of a malfunction of equipment important to safety previously evaluated in the FSAR.

2) Does the subject of this evaluation create the possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report?

   Addition of the fire protection lines and Non-Class 1E duct bank to the Nuclear Support Center will not create the possibility of an accident nor create the possibility of a malfunction of equipment important to safety than any previously evaluated in the FSAR.

3) Does the subject of this evaluation reduce the margin of safety as defined in the basis for any technical specification?

   The Plant Technical Specifications section 3/4.9.5 discusses the communications requirements between the Control Room and the Refueling Station required during reactor refueling operations. The change proposed by this package does not affect nor impact these requirements since the proposed duct bank will not be used for Refueling communications. Therefore, no change is required to the Technical Specification due to the proposed change.

Based upon the above, there is no unreviewed safety question.
Approved: 7/20/90

Unreviewed Safety Question Evaluation #90-155

Subject: Temperature Monitoring Instrumentation

Description: Temperature monitoring instrumentation was added in response to NRC Bulletin 88-08 to provide continuing assurance against fatigue failure of normal charging, alternate charging and the auxiliary spray lines. Calculations have since shown that piping integrity would not be jeopardized should inleakage occur over the life of the plant; therefore, such temperature monitoring instrumentation is not necessary and is to be deleted.

Safety Evaluation:

1) Does the subject of this evaluation increase the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report?

   The incremental fatigue usage factors (CUF) calculated for the Normal Charging, Alternate Charging and Auxiliary Spray piping are below ASME Code allowable value. Therefore, the piping structural integrity against fatigue failure would not occur should isolation valve leakage continue over the life of the unit. All calculated stress values are within respective ASME Code allowable limits. Thus, original design margins remain unaffected, and are maintained within the original design basis. The functionality and operability of the systems would not be compromised. Therefore, the subject change does not increase the probability of occurrence or consequences of an accident previously evaluated in the SAR. Also, deletion does not increase the probability of occurrence or increase the consequences of a malfunction of equipment important to safety than any previously evaluated in the SAR.

2) Does the subject of this evaluation create the possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report?

   See discussion under (1). The change does not create the possibility of an accident or a different type of malfunction of equipment important to safety than any previously evaluated in the SAR.

Unreviewed Safety Question Evaluation #90-155 (Cont'd)

3) Does the subject of this evaluation reduce the margin of safety as defined in the basis for any technical specification?

Since the structural integrity of the unisolable piping is not affected, the subject of this evaluation does not reduce the margin of safety as defined in the basis for any Technical Specification.

Based upon the above, there is no unreviewed safety question.

Approved: 8/14/90

Unreviewed Safety Question Evaluation #90-157

Subject: Heater Drips

Description: This change to the subject system P&ID changes the valve notation from "locked open" to "locked in place" for valves AC-0425, 0427, 0429, and 0431. Reference 9 is to be deleted on valves AC-0424, 0426, 0428, and 0430. This is for consistency with the as-built configuration, the valve locking program, and other design documents.

Safety Evaluation.

1) Does the subject of this evaluation increase the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report?

No accidents in the Auxiliary Cooling Water (AC) System are analyzed in the UFSAR, Changing the valves from "locked open" to "lock in place" and deleting the requirement for throttling to set proper flow rates for the other subject valves does not affect the system design basis or operation of the plant. Therefore, this change does not increase the probability of occurrence of an accident previously evaluated in the UFSAR.

This change does not change, degrade, or prevent actions; alter any assumptions or conclusions previously made; or result in any increase in accident doses for any accident because during preoperational testing of the AC system, the downstream valves were throttled to adjust the seal water flow to the MS Drip Tank Pumps as documented in the Valve Locking Program. Therefore, this change does not increase the consequences of an accident previously evaluated in the UFSAR.

This change does not affect the system design basis or operation of the plant. This change does not affect the operability or functionability of the AC system and does not impact either directly or indirectly, any equipment important to safety. Therefore, this change does not increase the probability of occurrence or consequences of a malfunction of equipment important to safety previously evaluated in the UFSAR.

Unreviewed Safety Question Evaluation #90-157 (Cont'd)

2) Does the subject of this evaluation create the possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report?

This change does not affect the AC system operation or function. The components affected by this change are located inside the TGB and effects of a failure of these components would be confined to the TGB which is not a safety-related structure. Therefore, this does not impact any previous design basis analysis because no equipment has been deleted or added since. Should the valves or line fail (leak or break), this event would not create the possibility of an accident of a different type than any previously evaluated in the UFSAR. Existing accidents bound this change.

This change does not affect the operability and functionability of the AC system or that of any safety-related system. Should the valves fail (leak or break), this event would not create the possibility of a different type of malfunction of equipment important to safety than previously evaluated in the UFSAR.

3) Does the subject of this evaluation reduce the margin of safety as defined in the basis for any technical specification?

Section 3/4.7 of the Technical Specifications was reviewed. The AC system is not governed by any Technical Specification. Operational and functional requirements of the AC system are not altered by this change. Therefore, this change does not reduce the margin of safety as defined in the basis for any Technical Specification.

Based upon the above, there is no unreviewed safety question.

Approved: 8/09/90

Unreviewed Safety Question Evaluation #90-160

Subject: Steam Generator Tube Rupture

Description: The UFSAR is to be revised for consistency with WCAP-12369 for steam generator tube rupture.

Safety Evaluation:

1) Does the subject of this evaluation increase the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report?

No physical or procedural changes to the plant are proposed. The proposed change is to a description of an accident already presented in the UFSAR. The results of the analysis are within the acceptance limits of the SRP. Therefore, the probability of this occurrence of an accident is not increased due to this proposed change.

WCAP-12369 is the licensing basis for the SGTR accident. The proposed change only makes the UFSAR consistent with the licensing basis. The SGTR analysis results are within the acceptance limits as specified in the SRP. Therefore, the consequences of an accident previously evaluated in the SAR are not increased.

No physical or procedural changes to the plant are proposed. The mass and energy releases, and doses will not impact equipment important to safety. The results of the analysis are within the acceptance limits of the SRP. Therefore, there is no increase in the probability of equipment malfunction for any previously evaluated SAR accident.

WCAP-12369 is the current licensing basis for the steam generator tube rupture event. The proposed change only makes the UFSAR consistent with the current licensing basis. The results of the analysis are within the acceptance limits of the SRP. Therefore, the consequences of a malfunction of equipment important to safety previously evaluated in the SAR is not increased.

2) Does the subject of this evaluation create the possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report?

Steam generator overfill does not occur. Therefore, a SGTR coincident with a steamline break does not occur. No physical or procedural changes to the plant are proposed. The proposed change is to a description of an accident already presented in the UFSAR.

Unreviewed Safety Question Evaluation #90-160 (Cont'd)

The results of the analysis are within the acceptance limits of the SRP. The doses are external to containment and will not impact equipment important to safety. Therefore, this proposed changes does not create the possibility of a different type of malfunction of safety-related equipment.

3) Does the subject of this evaluation reduce the margin of safety as defined in the basis for any technical specification?

The results presented in the proposed change to the steam generator tube rupture accident analysis do not exceed the acceptance limits. The margin of safety, according to NSAC-125, is not affected when results are within the acceptance limit. The resulting doses are well below the acceptance limits. Therefore, the margin of safety is not reduced.

Based upon the above, there is no unreviewed safety question.

Approved: 9/20/90

Unreviewed Safety Question Evaluation #90-162

Subject: Liquid Waste Processing System

Description: The subject system P&ID is to be revised to include drain valves to reflect the as-built condition.

Safety Evaluation:

1) Does the subject of this evaluation increase the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report?

The subject of this evaluation does not increase the probability of occurrence of an accident as evaluated in the SAR. The safety analysis is based on all drain valves performing their safety function by remaining closed during normal operation and being able to open when required. This change does not adversely affect the safety analysis probability of an accident.

The LWPS does not perform a safety function other than Reactor Containment Building (RCB) isolation. Failure of the remaining portion of the system shall not compromise any safety-related system nor prevent a safe shutdown of the plant. Since the valves associated with this evaluation are not used for containment isolation, they perform no safety function nor do they compromise any safety-related system or prevent a safe shutdown of the plant. The added valves are not associated with the worst case uncontrolled radioactive release.

Because the valves perform no safety function, successful operation or failure of these valves would not have been used as a basis for plant safety or safe shutdown.

Therefore, there is no increase in the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report.

Unreviewed Safety Question Evaluation #90-162 (Cont'd)

2) Does the subject of this evaluation create the possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report?

As described in (1), this change does not affect the possibility for an accident or malfunction.

3) Does the subject of this evaluation reduce the margin of safety as defined in the basis for any technical specification?

The valves associated with this evaluation do not affect the margin of safety as defined in the basis for the Liquid Waste Technical Specification.

Based upon the above, there is no unreviewed safety question.

Approved: 8/14/90

Unreviewed Safety Question Evaluation #90-163

Subject: Liquid Waste Processing System

Description: Vent Valve WL 1231 is to be added to the subject system P&ID to reflect as-built condition.

Safety Evaluation:

1) Does the subject of this evaluation increase the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report?

The subject of this evaluation does not increase the probability of occurrence of an accident as evaluated in the SAR. The safety analysis is based on all vent valves performing their safety function by remaining closed during normal operation and being able to open when required. This change does not adversely affect the safety analysis probability of an accident.

The LWPS does not perform a safety function other than Reactor Containment Building (RCB) isolation. Failure of the remaining portion of the system shall not compromise any safety-related system nor prevent a safe shutdown of the plant. Since the valve associated with this evaluation is not used for containment isolation, it performs no safety function nor does it compromise any safety-related system or prevent a safe shutdown of the plant. The added valve is not associated with the worst case uncontrolled radioactive release.

Because the valve performs no safety function, successful operation or failure of this valve would not have been used as a basis for plant safety or safe shutdown.

Therefore, there is no increase in the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report.

2) Does the subject of this evaluation create the possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report?

As described in (1), this change does not affect the possibility for an accident or malfunction

Unreviewed Safety Question Evaluation #90-163 (Cont'd)

3) Does the subject of this evaluation reduce the margin of safety as defined in the basis for any technical specification?

The valves associated with this evaluation do not affect the margin of safety as defined in the basis for the Liquid Waste Technical Specification.

Based upon the above, there is no unreviewed safety question.

Approved: 8/14/90

Unreviewed Safety Question Evaluation #90-165

Subject: EAB Main Area HVAC System

Description: This change to the subject system P&ID corrects the location of return air with respect to ETL fire/isolation dampers and corrects the airflow quantities. The change is for consistency with actual design and as-built conditions.

Safety Evaluation:

1) Does the subject of this evaluation increase the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report?

   This change is only a correction of the P&ID's per as-built conditions. There is no change in the existing system design or operation. The accidents previously evaluated in the SAR are based on the existing system design and operation. The existing equipment is already designed for the corrected air flows and return air location per this change. Therefore, there is no increase in the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report.

2) Does the subject of this evaluation create the possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report?

   Since accident analyses are based on existing design, and there is no impact on any equipment, this change to the P&ID to reflect existing design does not create the possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report.

3) Does the subject of this evaluation reduce the margin of safety as defined in the basis for any technical specification?

   The Tech. Specs. have no limitations on requirements for the subject system air flow quantities or the return air location. This change does not affect room temperatures given on Table 3.7-3. Therefore, there is no reduction in the margin of safety as defined in the basis for any Technical Specification.

Based upon the above, there is no unreviewed safety question.

Approved: 8/14/90

Unreviewed Safety Question Evaluation #90-166

Subject: Letdown Orifice Header Isolation Valve

Description: This change to the subject P&ID's revises the logic diagram for valve FV-0011 to reflect the as-built condition. This change more accurately reflects the open/close sequencing requirements of FV-0011, LCV-0465, and LCV-0468.

Safety Evaluation:

1) Does the subject of this evaluation increase the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report?

   The equipment is wired correctly in accordance with Electrical Wiring Elementary Diagram 9ECV12-05 and the intent of the design. This is a paper change only to more accurately represent the operational requirements of FV-0011 and the as-built configuration. This paper change has no physical impact to the plant configuration or operation.

2) Does the subject of this evaluation create the possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report?

   See response under (1). The change does not create the possibility for an accident or malfunction of equipment important to safety of a different type than any evaluated previously in the safety analysis report.

3) Does the subject of this evaluation reduce the margin of safety as defined in the basis for any technical specification?

   CVCS Letdown components and specific components receiving Essential Safety Feature Actuation signals are not addressed in the Tech. Specs. Since there is no change to the system or change to the function of operability of the valves, there is no reduction in the margin of safety as defined in the basis for any Technical Specification.

Based upon the above, there is no unreviewed safety question.

Approved: 8/14/90

Unreviewed Safety Question Evaluation #90-168

Subject: Component Cooling Water Pump

Description: The CCW Pump 1C motor is to be replaced. The existing motors are of an obsolete frame size. The onsite space CCW pump motor is a different frame size with slightly different electrical and physical characteristics.

Safety Evaluation:

1) Does the subject of this evaluation increase the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report?

This change does not impact operation of the Component Cooling Water system, as the replacement motor operating characteristics are essentially identical to the existing motor characteristics. Potential fault current contributions of the replacement motor have been reviewed and determined to be well within the affected feeder breaker interrupting rating and switchgear bus bracing design limits. The proposed change results in a net reduction in auxiliary bus and standby diesel generator steady-state loadings and a negligible impact on standby diesel generator transient loading criteria. Existing environmental and seismic design criteria are still valid, applicable and bounding. The plant design basis impacts resulting from the change have a negligible impact on existing design margins. There is no change in the ability of the standby diesel generator to start in the event of a LOOP or SI signal and the ability of the diesel generator to automatically start and accept ESF loads within the specified time limits is not affected. On this basis, the subject of this review does not increase the probability of occurrence of an accident as previously evaluated in the Safety Analysis Report.

This change results in a negligible impact to existing plant safety design margins. The subject of this review does not change the ability of the standby diesel generator to start in the event of a LOOP or SI signal and does not affect the ability of the diesel generator to automatically start and accept ESF loads within the specified time limits. Since all ESF loads are still being automatically connected to the standby diesel generator, there is no potential increase in consequences. The accident analyses presented in Chapter 15 of the UFSAR still remain bounding. On this basis, the change does not increase the consequences of an accident previously evaluated in the Safety Analysis Report.

Unreviewed Safety Question Evaluation #90-168 (Cont'd)

Based on the above, this change does not increase the probability of occurrence or consequences of a malfunction of equipment important to safety previously evaluated in the Safety Analysis Report.

2) Does the subject of this evaluation create the possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report?

This change represents a negligible impact to existing plant safety design margins. Changes resulting from the subject of this review represent conditions analyzed in the original plant design. On this basis, the subject of this review does not create the possibility of an accident of a different type or a different type of malfunction of equipment important to safety than any previously evaluated in the Safety Analysis Report.

3) Does the subject of this evaluation reduce the margin of safety as defined in the basis for any technical specification?

The subject of this review represents a negligible impact to existing plant safety design margins. The Technical Specifications do not specifically address CCW pump motor designs, standby diesel generator transient loading requirements, protective relaying settings or fault current magnitudes. There is no numerical or intent change to the Technical Specifications. On this basis, the subject of this review does not reduce the margin of safety as defined in the basis for any Technical Specification.

Based upon the above, there is no unreviewed safety question.

Approved: 8/15/90

Unreviewed Safety Question Evaluation #90-171

Subject: EAB Filter Efficiency

Description: The stated efficiency of the EAB air handling unit (AHU) prefilter and high-efficiency filter is changed from 85% and 95%, respectively, to 80% and 90%. This lower efficiency still exceeds minimum requirements in comparison with recommendations in the ASHRAE Equipment Handbook (1975), Chapter 10, Table 4.

Safety Evaluation:

1) Does the subject of this evaluation increase the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report?

   Based on the reference above, a minimum efficiency of 90% for the high efficiency filter is more than adequate for preventing excessive dust buildup in the EAB. The prefilter efficiency of 80% is also more than adequate as the prefilter in this application per the reference. No credit was taken for particulate removal by these filters in any accident dose analysis previously evaluated in the SAR.

2) Does the subject of this evaluation create the possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report?

   The only change is in the efficiencies of the EAB AHU. The combined filter efficiency remains high enough to maintain a sufficiently dust-free environment to ensure there is no possibility of equipment malfunction due to dust accumulation. Therefore, the change does not create the possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report.

3) Does the subject of this evaluation reduce the margin of safety as defined in the basis for any technical specification?

   The basis for the EAB HVAC Tech. Specs. is maintaining the applicable room temperatures at or below a specified value to ensure the design parameters of the equipment in the room is not exceeded. The efficiency change does not affect the cooling capability of the EAB AHUs, and therefore does not affect the margin of safety as defined in the basis for the Technical Specification.

Based upon the above, there is no unreviewed safety question.

Approved: 8/30/90

Unreviewed Safety Question Evaluation #90-180

Subject: Main Steam Line Break

Description: Table 3.11-1 of the STPEGS UFSAR is to be revised to incorporate the minimum actual equipment qualification temperature and pressure. These temperatures and pressures are above the values corresponding to the Main Steam Line Break (MSLB) design basis accident. The containment accident temperature will be changed from 323°F to 325°F and the containment accident pressure will be changed from 48.4 psig to 51 psig.

Safety Evaluation:

1) Does the subject of this evaluation increase the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report?

The subject change revises the temperatures and pressures given in the SAR to reflect the values to which the equipment has been qualified by testing or analysis. Since these qualification temperatures and pressures exceed those calculated for the most limiting design basis accident (MSLB), the probability of a previously evaluated accident is unchanged.

Because this equipment will be operable to mitigate the consequences of all previously evaluated accidents, there will be no increase in the accident consequences.

Use of the higher equipment qualification values will not increase the probability of equipment malfunction. All equipment required to operate post-accident and which is subject to these environmental conditions, with the exception of the Reactor Containment Fan Coolers (RCFC) motors, has been qualified by test to a minimum temperature of 325°F (plus the 15°F margin required by Section 6.3.1.5 of IEEE 323-1974) and a pressure of 51 psig. Review of the qualification reports for all electrical equipment inside the containment required to be operable post-accident has shown that the equipment has been tested, with the exception noted above, to a minimum temperature of 340°F and a minimum pressure of 51 psig. The resulting minimum qualification test temperature of 340°F follows revision of the containment accident qualification temperature given in Table 3.11-1 to 325°F. The single exception to this is the RCFC motor. The motor has been qualified by test to a temperature of 325°F. The RCFC motor is actually qualified (by analysis) to a temperature of at least 338°F (323°F plus the 15°F required by IEEE 323).

Unreviewed Safety Question Evaluation #90-180 (Cont'd)

The calculated containment temperature profile for equipment qualification after revision to incorporate a new peak temperature of 325°F requires that the peak temperature of 340°F be maintained for a minimum of 90 seconds. Review of the actual test data shows that this equipment was qualified for a significantly longer period of time at a temperature of 330°F. This motor is qualified by analysis for more than 90 seconds at a temperature of 340°F. A similar review of the test pressures used for qualifying equipment inside the containment shows that the lowest qualification pressure is 51 psig, which agrees with the proposed SAR change.

The calculated post-accident temperatures and pressures are well within the values provided in this change. Therefore, the necessary equipment will be operable in the postulated post-accident environment. Revision of the containment equipment qualification temperatures and pressures as given in the SAR has no effect on the consequences of safety-related equipment malfunction since the postulated failure of safety-related equipment is already incorporated into the design basis by consideration of single random failure.1

2) Does the subject of this evaluation create the possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report?

The safety-related equipment inside containment is qualified to higher values than previously given in the SAR. This has no effect on the possibility of a new or different type of accident. No possibility of a different type of equipment malfunction is created by revising the qualification data given in the SAR to reflect actual qualified temperatures and pressures.

3) Does the subject of this evaluation reduce the margin of safety as defined in the basis for any technical specification?

Qualification of safety-related equipment is not incorporated into or specifically addressed in the Technical Specifications. Qualification of the subject equipment has been established by test and/or analysis such that continued equipment operability during postulated post-accident environmental conditions is maintained. As a result, the margin of safety as provided in the Technical Specification Bases is maintained.

Based upon the above, there is no unreviewed safety question.

Approved: 10/03/90

ATTACHMENT 2
JUSTIFICATIONS FOR CONTINUED OPERATION

Justification for Continued Operation (PR 880508)

Subject: Fuel Handling Building Filter Heater

Description: The electric heating coils are turned "on" and "off" by the low flow switch in its filter unit, "on" above the setpoint and "off" below the setpoint. When all three trains are actuated the 29,000 cfm exhaust flow is split between the two filter trains, each composed of three filter units. Flow through each unit is 4833 cfm. Since this less than the setpoint, the flow switch prevents the heater from energizing.

Safety Evaluation:

1) Does the subject of this evaluation increase the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report?

   The heater is provided to limit the humidity of the air entering the charcoal filter to a maximum of 70%. If the relative humidity increases above 70%, only a slight decrease in filter efficiency occurs. The offsite dose consequences increase only marginally when accounting for an operator action time of 30 minutes to limit relative humidity to 30%. The revised doses continue to be well within the regulatory criteria.

2) Does the subject of this evaluation create the possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report?

   The heater is provided to limit the humidity of the air entering the charcoal filter to a maximum of 70%. If the relative humidity increases above 70%, only a slight decrease in filter efficiency occurs. The offsite dose consequences increase only marginally when accounting for an operator action time of 30 minutes to limit relative humidity to 30%. The revised doses continue to be well within the regulatory criteria.

Justification for Continued Operation (PR 880508) (Cont'd)

3) Does the subject of this evaluation reduce the margin of safety as defined in the basis for any technical specification?

The heater is provided to limit the humidity of the air entering the charcoal filter to a maximum of 70%. If the relative humidity increases above 70%, only a slight decrease in filter efficiency occurs. The offsite dose consequences increase only marginally when accounting for an operator action time of 30 minutes to limit relative humidity to 30%. The revised doses continue to be well within the regulatory criteria.

Based upon the above, there is no unreviewed safety question.

Approved: 12/16/88

Justification for Continued Operation (PR 890288)

Subject: Molded-Case Circuit Breakers (MCCB)

Description: The NRC is concerned that the subject electrical equipment being procured as new and assumed to meet all applicable plant design requirements and or original manufacturer's specifications may, in fact, not meet or exceed these requirements and specifications.

Safety Evaluation:

1) Does the subject of this evaluation increase the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report?

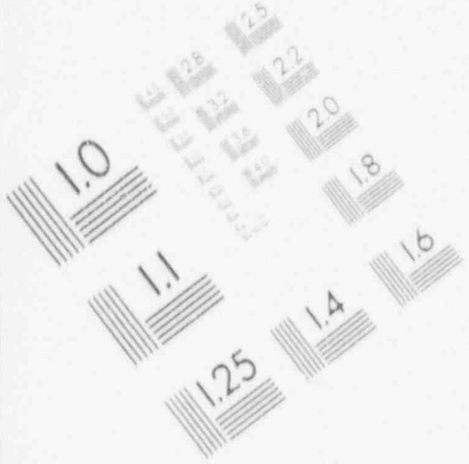
HL&P has assumed that the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the SAR is not noticeably increased even though the MCBs are not traceable to the manufacturer. Since these MCCBs have been visually inspected and not found to be to have been refurbished by an unauthorized source, these MCCBs are assumed to have been built by the original manufacturer. All that is missing is documentation confirming that the MCCB is traceable to the manufacturer. MCCBs procured from a manufacturer are tested and calibrated in accordance with recognized industry standards. This indicates these MCCBs are capable of performing their design function.

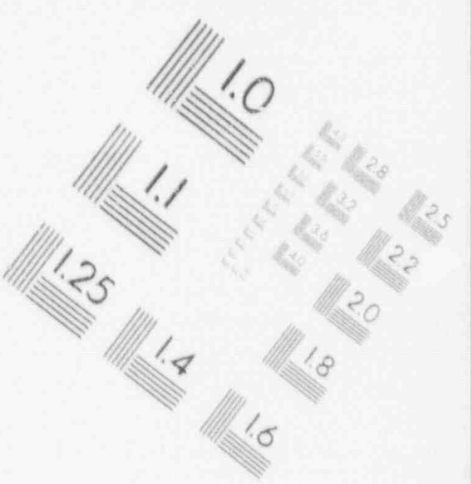
2) Does the subject of this evaluation create the possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report?

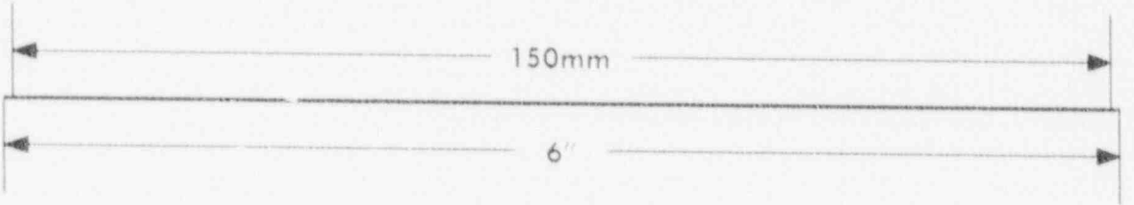
Due to the electrical testing performed on safety-related MCCBs installed at STP, the inspection program for suspect MCCBs, the relatively small number of breakers in question, the likelihood of a seismic event and/or a severe electrical fault occurring during the identified time interval, and the limited period of time that this JCO is in effect, this possibility is considered is not significantly affected.

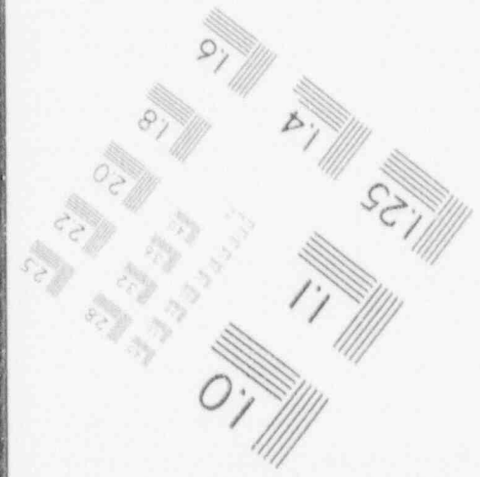
2

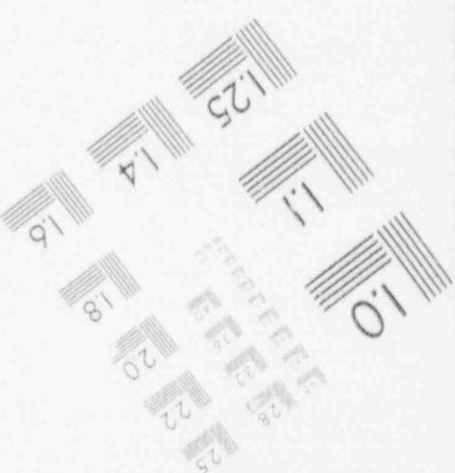
IMAGE EVALUATION TEST TARGET (MT-3)











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770 BASKET ROAD
P.O. BOX 338
WEBSTER, NEW YORK 14580
(716) 265-1600

Justification for Continued Operation (PR 890288) (Cont'd)

3) Does the subject of this evaluation reduce the margin of safety as defined in the basis for any technical specification?

Whether or not the subject of this evaluation reduces the margin of safety as defined in the basis for any Technical Specification cannot be precisely established. However, any reduction in margin of safety is minute and safe operation is reasonably assured.

Based upon the above, there is no unreviewed safety question.

Approved: 8/1/89

Justification for Continued Operation (PR 890369)

Subject: Essential Cooling Water System Intake Structure Ventilation Fan

Description: This JCO provides justification that the ECWIS ventilation system for train 1C can meet its safety design basis with an ECW Ventilation fan inoperable.

Safety Evaluation:

1) Does the subject of this evaluation increase the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report?

   Single fan operation provides the necessary air flow rate to maintain the temperature limit the ECW pump room below design limits for both normal and accident plant operation. Both of the fans were powered from Train C electrical and therefore loss of electrical power to the fans still meets single failure criteria. The subject of this evaluation does not increase the probability or the occurrence of an accident or the malfunction of equipment important to safety.

2) Does the subject of this evaluation create the possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report?

   The subject of this evaluation does not create the possibility of an accident or malfunction of a different type since the fan has the capability of providing 100% cooling requirement in reference to actual cooling loads. The equipment served by the single fan will perform its safety function during both normal and post-accident conditions. Since the fan is capable of supplying 100% of the cooling load, it meets single failure criteria as was the original requirement for the ECWIS ventilation system.

3) Does the subject of this evaluation reduce the margin of safety as defined in the basis for any technical specification?

   The subject of this evaluation does not reduce the margin of safety as defined by the basis for any technical specification. No change to the Technical Specification is required to accept operation of this ECW Train C ventilation system. The safety and functional requirements of Train C ventilation system will be maintained during both normal and accident conditions.

Based upon the above, there is no unreviewed safety question.

Approved: 5/15/89

Justification for Continued Operation (PR 890511)

Subject: Steam Generator PORVs

Description: The purpose of this JCO is to determine the operability status of the Steam Generator Power Operated Relief Valves (SG PORV) for STPEGS Units 1 & 2 following identification of a potential deficiency concerning available valve thrust.

Safety Evaluation:

1) Does the subject of this evaluation increase the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report?

   Performance of the compensatory testing measures will ensure operability of the valves to respond to normal and abnormal operational transients and events. The existing transient analyses are bounding since the test is being performed to ensure valve operation. The testing will identify any malfunction of the PORV's and therefore, ensure operability of the PORV's to perform their safety function. The testing is being performed to ensure operation of the valves and thus has no impact on transients previously evaluated in the SAR.

2) Does the subject of this evaluation create the possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report?

   SAR Table 10.3-1 addresses a main steam power operated relief valve stuck open or one which fails to remain closed. This transient is addressed in SAR chapter 15.1.4.1. This section addresses the spurious opening or failure to close of the largest single steam dump, relief or safety valve. No new accident or malfunction is created by the testing of the PORV in support of this JCO.

3) Does the subject of this evaluation reduce the margin of safety as defined in the basis for any technical specification?

   The compensatory testing measures exceed those described in the technical specifications. These measures are being taken to preclude potential valve failures and ensure continued valve operability until such time as valve or actuator modifications are installed.

Based upon the above, there is no unreviewed safety question.

Approved: 6/28/90

Justification for Continued Operation (PR 890555)

Subject: Inoperable CVCS Changing Pump Supplemental Fan Cooler Motor

Description: The purpose of this JCO is to determine the operability status of the Unit 1 1B Chemical and Volume Control Centrifugal Charging Pump (CCP) with one of the 50% capacity CCP room supplemental cooler fan motors inoperable.

Safety Evaluation:

1) Does the subject of this evaluation increase the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report?

   The CCP remains completely operational under single fan operation of the Room 041 supplemental cooler. The probability of occurrence or the consequences of an accident or malfunction are not increased because the capability of the room cooler to maintain normal and accident environments within the qualified envelope is maintained. This JCO does not increase the likelihood of a high energy line break in the area.

2) Does the subject of this evaluation create the possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report?

   The design temperature is maintained in Room 041 and, therefore, no additional impact is imposed which has not been addressed previously. Since the design temperature in the room is not altered, previously analyzed HELBA and FHAR redundant safe shutdown pathways are unaffected. A single fan in operation is capable of maintaining the design basis temperature during all modes of operation. Therefore, the subject of this evaluation does not create the possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report.

3) Does the subject of this evaluation reduce the margin of safety as defined in the basis for any technical specification?

   There is no reduction in margin of safety since the CCP supplemental room cooler with single fan operation will maintain the room temperature within the design maximum temperature limits.

Based upon the above, there is no unreviewed safety question.

Approved: 7/16/89

Justification for Continued Operation (PR 890653)

Subject: Penetration Seals

Description: A discrepancy was found in the requirements for wall penetration seals.

Safety Evaluation:

1) Does the subject of this evaluation increase the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report?

   The existing flood analysis bounds possible events, so the probability of occurrence or the consequences of an accident or malfunction of equipment does not increase.

2) Does the subject of this evaluation create the possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report?

   Where necessary, administrative actions can be taken to assure that the effects of the failure of the penetration seals remain bounded by the existing design basis. Otherwise, failure of the penetration seals will not result in an internal flood elevation in other rooms in excess of those already evaluated. Therefore, this evaluation does not create the possibility for an accident or malfunction of a different type than any previously analyzed.

3) Does the subject of this evaluation reduce the margin of safety as defined in the basis for any technical specification?

   Loss of equipment associated with this potential for internal flooding has been previously addressed. Loss of the Reactor Makeup Water Pumps due to internal flooding will not affect the ability to reduce the inventory of the RWST, nor is it required to accomplish safe shutdown or accident mitigation. Therefore, there is no reduction in the margin of safety as defined in the basis for any technical specification.

Based upon the above, there is no unreviewed safety question.

Approved: 9/8/89

Justification for Continued Operation (PR 890833)

Subject: Thrown Rod in Standby Diesel Generator

Description: This JCO is being revised to extend the effective date until 3/30/90 to allow additional time to incorporate the final results of the stress analysis being performed by the vendor, Cooper-Bessemer, and Aptech.

Safety Evaluation:

1) Does the subject of this evaluation increase the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report?

   The existing failure occurred as a result of an improper repair made in response to a unique non-conformance in the manufacture of the No. 4 connecting rod assembly in SBDG #22. As the root cause of the failure was unique to the failed connecting rod assembly, the failure would not occur in other connecting rods. Therefore, the probability of occurrence or consequences of an accident or a malfunction of equipment important to safety is not increased by operation of Unit 1, by maintaining Unit 2 in mode 5 until SBDG #22 is operable, or by operation of Unit 2 after SBDG #22 is declared operable.

2) Does the subject of this evaluation create the possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report?

   The vendor has not identified similar repairs to other non-conforming connecting rods and review of industry experience shows the one plug repair to be unique. The vendor's manufacturing process appears to have been adequate. No additional failures of SBDGs will occur due to the unique repair of the No. 4 connecting rod assembly on SBDG #22. The safety analyses for STPEGS will not be impacted by operation of Unit 1 as currently configured or by operation of Unit 2 after repair of SBDG #22. Therefore, operation of Unit 1 or maintenance of Unit 2 in mode 5 until SBDG #22 is operable or operation of Unit 2 after SBDG #22 is declared operable will not create the possibility of an accident or malfunction that has not been previously evaluated in the safety analysis report.

Justification for Continued Operation (PR 890833) (Cont'd)

3) Does the subject of this evaluation reduce the margin of safety as defined in the basis for any technical specification?

The observed failure of SBDG #22 was caused by a unique improper repair. The other SBDGs will not suffer a similar failure. As such, operation of Unit 1, and maintaining Unit 2 in mode 5 until SBDG #22 is operable with the currently installed connecting rods or operation of Unit 2 after SBDG #22 is declared operable will not increase the challenges to operation of the SBDGs. Redundant, independent, on-site sources of AC power will be available as required by GDC 17. The margin of safety as defined in Bases for Technical Specifications 3/4.8.1, 3/4.8.2, and 3/4.8.3 will remain unchanged.

Based upon the above, there is no unreviewed safety question.

Approved: 2/17/90

Justification for Continued Operation (PR 900137)

Subject: Pressurizer Level Channel

Description: Pressurizer level channel LT-0466 reads approximately 6% higher than the lowest pressurizer level channel. The purpose of this JCO is to provide justification that the channel is operable, for purposes of reactor trip,and to restore the associated trip bistables to the non-tripped position.

Safety Evaluation:

1) Does the subject of this evaluation increase the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report?

The probability of an accident is not affected by this deficiency in that the placing the bistables in the normal position can not cause an event or transient that would lead to a challenge to the plant.

High pressurizer level reactor trip is a backup to high pressurizer pressure reactor trip for loss of external electrical load, and uncontrolled RCCA Bank withdrawal at power. In addition,it is used to mitigate the consequences of an increase in reactor Coolant Inventory created by a CVCS malfunction. Restoring the bistable to its normal position reestablishes the same measure of protection for this event as the Safety Analysis assumed. The "trip" associated with this channel will occur prior to where the Safety Analysis assumed it would occur. The channel responds as the other channels do for transient conditions; therefore, restoring it to operability does not increase the consequences of any accident.

The function of the high pressurizer level trip is not compromised by this action. Restoring the bistable to normal position reestablishes the same measure of protection for this event as the Safety Analysis assumed. The "trip" associated with this channel will occur prior to where the Safety Analysis assumed it would occur, or in the safe direction. The channel responds as the other channels do for transient conditions; therefore, restoring it to operability does not increase the probability of a malfunction of equipment important safety.

Justification for Continued Operation (PR 900137) (Cont'd)

There is no impact on the consequences of a malfunction of equipment important to safety. The consequences of a malfunction of the associated trip channel are analyzed in the UFSAR in Section 7.2.2.3.4. The trip function is a 2/4 function. This ensures a reactor trip, if needed, even with an independent failure in another channel used for control and when degraded by a second random failure. Placing the bistable in the normal position does not impact the consequences of it failing.

2) Does the subject of this evaluation create the possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report?

There is no possibility of an accident of a different type than any previously evaluated. The bistable in its normal position is the analyzed position for plant operation. Premature trip of this channel by increasing level is no different than the present status of the bistable.

3) Does the subject of this evaluation reduce the margin of safety as defined in the basis for any technical specification?

The margin of safety is not impacted. The trip setpoint is derived from the safety analysis limit adjusted for instrument errors. The error created by this condition creates a bias of the process seen by the instrument in the conservative direction. All of the required Technical Specification surveillances remain valid, since they measure the performance of the loop starting at the transmitter. The Bases for the Technical Specifications give a definition of operability of the Reactor Trip system instrumentation. The channel is operable in that it will provide a reactor trip signal when the parameter being monitored reaches its setpoint.

Based upon the above, there is no unreviewed safety question.

Approved: 4/27/90

Justification for Continued Operation (PR 900189)

Subject: Main Feedwater Isolation

Description: On March 29, 1990 STP Unit 1 experienced a plant trip from 100% power followed by a Main Feedwater Isolation signal. Main Feedwater Isolation Valve A1FW-FW-7144 failed to close for approximately 5 minutes after the event and Main Feedwater Isolation Valve A1FW-FW-7141 moved to an intermediate position, and subsequently closed approximately two minutes later. Failure to close was due to failure of the dump valves to reposition, releasing the hydraulic fluid from the valve actuators. This resulted from use of the hydraulic fluid at temperatures above the recommended maximum steady state service conditions, coupled with contamination resulting in fluid decomposition. This evaluation justifies operability of the MSIVs for these service conditions for the specified time frame.

Safety Evaluation:

1) Does the subject of this evaluation increase the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report?

The probability of an accident is not affected by this deficiency in that the only accident attributable to misoperation of the solenoid dump valve is loss of feedwater. The issue does not result in an increase in the probability of the event.

The accidents that are of concern are loss of normal feedwater, a steamline break, and excessive cooldown of the RCS. The consequences of those events, as documented in the UFSAR, remain the same. There is no change in the consequences of those events by the noted deficiency.

In-service history at actual operating conditions and maintenance and testing actions will provide assurance that the isolation valves operate successfully when required.

There is no impact on the consequences of a malfunction of equipment important to safety in that failure of a Main Feedwater Isolation Valve to close is analyzed in the Failure Modes and Effects Analysis in Chapter 10.4 of the UFSAR and in Chapter 15 of the UFSAR. The UFSAR analysis takes credit for the main feedwater regulating valves closing and the main feedwater pumps tripping on a feedwater isolation signal.

Justification for Continued Operation (PR 900189) (Cont'd)

2) Does the subject of this evaluation create the possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report?

There is no possibility of an accident of a different type than previously analyzed by the noted deficiency. Failure of a Main Feedwater Isolation Valve is specifically included in the UFSAR Chapter 10.4 Failure Modes and Effect Analysis.

Failure of a Main Feedwater Isolation Valve to close when required has been analyzed in the accident analysis. There is no possibility of creating a different type of malfunction than what was previously analyzed.

3) Does the subject of this evaluation reduce the margin of safety as defined in the basis for any technical specification?

The margin of safety for the Technical Specifications dealing with the Main Feedwater Isolation Valve is the response of the valves to an initiating event within the required time frame. The in-service history at actual STP operating conditions and the maintenance and testing actions provide assurance that the valves will close in response to the feedwater isolation signal as designed. Either of the two dump valves, on each Main Feedwater Isolation Valve, opening will cause the Main Feedwater Isolation Valve to close within the Technical Specification required time frame. The specified test ensures that the solenoid repositions to the dump position relieving the hydraulic fluid from the actuator. The speed at which the Main Feedwater Isolation Valves closes is not affected by this deficiency once the dump valves reposition.

Based upon the above, there is no unreviewed safety question.

Approved: 4/5/90

Justification for Continued Operation (PR 900232)

Subject: Leakage Through Diesel Generator Knockout Panels

Description: The purpose of this JCO is to determine the operability of the Diesel Generators following discovery of water leaking into the individual bays through the knockout panels of the Diesel Generator building.

Safety Evaluation:

1) Does the subject of this evaluation increase the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report?

The probability of an accident is not affected by this deficiency in that the frequency of a design basis flood remains unchanged. The only change is that compensatory action will be taken to ensure the diesel generator bay will be maintained with a maximum water level that will not have any detrimental effects to any safety-related equipment. Disconnecting the Standby DG Drip Tank pumps has no impact as they are not safety-related. Decommissioning the drip tank pumps does not increase the probability of a fire as there are no additional combustibles or ignition sources due to these actions.

The basis of the design is to prevent water from entering the diesel generator bays. Although there will be some leakage of water into the bays, compensatory action will be taken to ensure the water will not exceed 4" on the floor and it will not have an effect on any safety-related components or equipment. Therefore, there is no increase in consequences previously evaluated.

No safety-related equipment or equipment important to safety will be affected by the 4" water depth. The diesel generator bays will be monitored such that the water level will not be allowed above 4" on the floor. Therefore, there will be no increase in the probability or consequences of malfunction of equipment important to safety previously evaluated in the SAR.

Justification for Continued Operation (PR 900232) (Cont'd)

2) Does the subject of this evaluation create the possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report?

The Standby DG Drip pump will be inoperable; however, it is nonsafety-related and is not required for safe shutdown. The action described does not increase the possibility of a fire since no combustibles or ignition sources are added. There will be no other equipment affected by this deficiency. The concern does not create the possibility for an accident or malfunction of equipment important to safety of a different type than any evaluated previously in the safety analysis report.

3) Does the subject of this evaluation reduce the margin of safety as defined in the basis for any technical specification?

The margin of safety is not impacted. The calculated leakage rate is based on the worst case measured and the leakage in other bays is less. The drip tank pumps perform no safety function and are not needed. The Diesel Generators will perform their intended function and there will be no adverse affect on any margins for Tech Spec items.

Based upon the above, there is no unreviewed safety question.

Approved: 5/15/90