

REGULATORY INFORMATION DISTRIBUTION SYSTEM (RIDS) *may*

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SUBJECT: Forwards 10CFR50.59 rept summarizing safety evaluations
 approved from 820717-1231. Rept format for responding to SER
 items described.

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DEC 27 1983

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SUSQUEHANNA STEAM ELECTRIC STATION
10 CFR 50.59 REPORT
ER 100450 FILE 841
PLA-2016

Docket No. 50-387

Dear Dr. Murley:

In accordance with 10CFR50.59, enclosed are 40 copies of the Susquehanna SES Unit 1 report which summarizes the safety evaluations approved from July 17, 1982 to December 31, 1982.

The format of the report is as follows:

SER No. - Unique number for each safety evaluation.

Cross Reference - Reference to the design document which contained the safety evaluation.

Description of Change - A brief description of the change made to procedures, equipment or tests.

Summary - This contains a summary of the three requirements for determining an unreviewed safety question as contained in 10CFR50.59(a)(2).

If you have any questions, please contact us.

Very truly yours,

B. D. Kenyon
Vice President-Nuclear Operations

Enclosures

cc: R. L. Perch US NRC
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U.S. Nuclear Regulatory Commission
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SER NO. 82-01

Cross Reference: PMR 82-269 Part 1

Description of Change:

Electrical isolation of the 13.8kV system to achieve electrical separation between units, so that Unit 2 construction cannot affect Unit 1 operations.

Summary:

- I. No. The 13.8kV system is not needed for Unit 1 safe shutdown and is therefore not the basis for evaluations in the FSAR.
- II. No. This modification removes such possibilities by preventing Unit 2 construction from affecting Unit 1 operation.
- III. No. The mitigating effects of this modification can only increase safety margins.

SER NO. 82-02

Cross Reference: PMR 82-269 Part 2

Description of Change:

Electrical isolation of Unit 2 systems under construction that could affect diesel generator security or operation.

Summary:

- I. No. This modification eliminates the possibility of Unit 2 construction affecting Unit 1 operation; it does not affect any FSAR evaluation.
- II. No. The possibilities of unevaluated accidents or malfunctions are decreased due to this modification.
- III. No. Unit separation by electrical isolation increases margins of safety as defined in the Technical Specifications by eliminating potential Unit 2 construction impacts on Unit 1 operation.

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SER NO. 82-03

Cross Reference: PMR 82-269 Part 3

Description of Change:

Electrical isolation of Unit 2 systems under construction that could affect the fuel pool cooling system security or operation.

Summary:

- I. No. This modification eliminates the possibility of Unit 2 construction affecting Unit 1 operation; it does not affect any FSAR evaluation.
- II. No. The possibility of unevaluated accidents or malfunctions are decreased by this modification.
- III. No. Unit separation by electrical isolation increases margins of safety as defined in the Technical Specifications by eliminating potential Unit 2 construction impacts on Unit 1 operation.

SER NO. 82-04

Cross Reference: PMR 82-279

Description of Change:

Add a spare relay contact to the INOPERABLE annunciator circuit for the RHRSW radiation monitor to indicate that the sample motor is not running.

Summary:

- I. No. This indication is not considered in any FSAR evaluations. It simply provides information to the operator that adequate sample flow does not exist.
- II. No. Existing circuitry will be used with an additional input to provide additional operator information. The use of existing equipment precludes the possibility of new accidents or malfunctions.
- III. No. Monitoring functions such as the one this modification provides have no effect on margins of safety as defined in the Technical Specifications.

SER NO. 82-05

Cross Reference: PMR 82-281

Description of Change:

Rework of pipe supports on various systems to provide adequate contact between pipe and piping supports.

Summary:

- I. No. The proposed action will enable the piping supports to function as originally designed; it therefore will not affect any FSAR evaluations.
- II. No. The return of the piping supports to conformance with original design specification cannot result in any near accident or malfunction.
- III. No. Rework of pipe supports to conform with their design specification will not reduce any Technical Specification margin of safety.

SER NO. 82-06

Cross Reference: PMR 82-282

Description of Change:

Relocation of Liquid Radioactive Waste (LRW) System flow transmitter to provide a better environment, i.e., temperature and humidity, for its electronics.

Summary:

- I. No. No change to the LRW release system is proposed other than transmitter relocation. The transmitter will be recalibrated prior to reuse.
- II. No. Physical relocation of the transmitter, with no other system changes, creates no new possibilities of accidents or malfunctions.
- III. No. System operation remains unchanged and therefore affects no margin of safety, other than improvement due to better transmitter reliability. Proper transmitter operation is verified by fulfilling Technical Specification surveillance requirements.



SER NO. 82-07

Cross Reference: PMR 82-244

Description of Change:

Addition of grounded wiring to the Annunicator System 820 power supply/ inverters to provide voltage protection.

Summary:

- I. No. The annunciator system is not safety-related. This change has no effect on any other safety-related systems.
- II. No. This addition of grounding wire cannot cause failure of any safety-related system.
- III. No. This addition of grounding wire to the annunciator system has no effect on the basis for any Technical Specification.

SER NO. 82-08

Cross Reference: PMR 82-167

Description of Change:

Restoration of 125 VDC panel doors to conform to original design intent by installing metal plates over open portions of panel which had been cut to alleviate equipment interference problems.

Summary:

- I. No. The panels are being restored to perform their original design intent. The structural integrity and internals of the cabinet were not affected by the non-conforming condition and therefore the change does not have to consider them.
- II. No. The cabinet internals are unaffected by this modification. The possibility of the metal plate coming loose from the cabinet after installation has been considered through the use of Q materials and applicable static and dynamic analyses.
- III. No. Only affects on the cabinet internals would affect Technical Specification bases. The internals remain unaltered.

SER NO. 82-09

Cross Reference: Test No. HF 62 048

Description of Change:

Performance of RPV Level Instrument Lines Steady State Vibration Test to verify that vibration is within acceptable limits.

Summary:

- I. No. This test is performed prior to fuel load with both reactor recirculation pumps in service. No plant or system manipulation outside the constraints of any safety analysis will be performed.
- II. No. See I above.
- III. No. This test does not result in operation outside the constraints of any safety analysis.

SER NO. 82-10

Cross Reference: Test No. HF-61-031

Description of Change:

Performance of RWCU System Steady State Vibration Test to verify selected RWCU system piping vibration to be within acceptable limits.

Summary:

- I. No. The RWCU system will be run in accordance with an approved operating procedure. No system or plant manipulation outside the constraints of the safety analysis will be performed.
- II. No. See I above.
- III. No. See I above.

SER NO. 82-11

Cross Reference: Test No. HF-50-044

Description of Change:

Performance of RCIC System Piping Steady State Vibration Test to verify vibration to be within acceptable limits.

Summary:

- I. No. This test will be performed prior to fuel load utilizing auxiliary steam to run the RCIC turbine. No system operation outside of safety analysis constraints will occur.
- II. No. See I above.
- III. No. See I above.

SER NO. 82-12

Cross Reference: PMR 82-287

Description of Change:

Fuel Handling System switch replacement.

Summary:

- I. No. This modification does not affect the fuel handling related accident analyses. The new switches will perform the original function and will also allow interlock functioning for the entire length of bridge travel over the core.
- II. No. The new switches serve the original design function. Neither normal functioning of these switches nor their failure constitute a condition not bounded by previous analysis.
- III. No. No Technical Specifications are affected by this change.

SER NO. 82-13

Cross Reference: PMR 82-290

Description of Change:

Rewiring of fire protection system smoke detector.

Summary:

- I. No. The wires will be reterminated and retested to ensure that the system will perform its design function.
- II. No. The design function of the system is not being changed.
- III. No. Margins of safety are not reduced because the system function is not altered and retesting will verify system design operability.

SER NO. 82-14

Cross Reference: PMR 82-064

Description of Change:

Improve auxiliary boiler recirculation pump capacity and reliability by replacing bronze impellers with stainless steel impellers.

Summary:

- I. No. The Station Auxiliary Boilers are not safety-related. Their integrity is not affected by this material change and is not the basis for any FSAR evaluations.
- II. No. This modification has no effect on the operation of the boilers.
- III. No. This material change does not permit or result in operation of any system outside the bounds of any safety analysis.



SER NO. 82-15

Cross Reference: PMR 82-164

Description of Change:

Modification to support replacement of Radwaste Building Chilled Water System cooling coils with new coils of a different type.

Summary:

- I. No. The Radwaste Building Chilled Water System has no safety-related function and therefore compromises no previous safety evaluation.
- II. No. The only change from present design is the rework of non-safety related piping, which does not need to be considered in any new FSAR evaluations.
- III. No. The Radwaste Building Chilled Water System is not addressed in the Technical Specifications and has no safety-related function.

SER NO. 82-16

Cross Reference: PMR 81-031

Description of Change:

Removal of manual valve actuators from various air-operated containment isolation valves, to preclude overriding of automatic isolation signals.

Summary:

- I. No. This modification will ensure the proper operation of the primary containment isolation system as evaluated in the FSAR.
- II. No. This modification eliminates the possibility of the valves from not performing their design functions.
- III. No. These manual actuators are not considered in the basis for any Technical Specification.

SER NO. 82-17

Cross Reference: PMR 81-113

Description of Change:

Installation of low lead oil return system on chilled water system for the reactor, turbine and radwaste buildings.

Summary:

- I. No. These chilled water systems have no safety-related function, and therefore do not compromise any FSAR safety analysis.
- II. No. These chilled water systems are not safety-related, and pose no threat to any other safety-related systems.
- III. No. These systems do not form the basis for any Technical Specification.

SER NO. 82-18

Cross Reference: PMR 82-302

Description of Change:

Refueling bridge power cable and reel replacement.

Summary:

- I. No. The FSAR analyses on fuel handling have been reviewed and this modification has no effect on them. The bridge will function as previously designed.
- II. No. The bridge will function as previously designed, so new situations are created.
- III. No. Fuel handling equipment operation, addressed by the Technical Specifications, remains unchanged and therefore safety margins are unchanged.



SER NO. 82-19

Cross Reference: PMR 82-107

Description of Change:

Relabeling of fire protection panels for ease of switch identification.

Summary:

- I. No. This modification involves no safety-related equipment, and the design system operation remains unchanged.
- II. No. See I above.
- III. No. This modification does not reduce the margin of safety as defined in the Technical Specifications for fire protection systems.

SER NO. 82-20

Cross Reference: PMR 82-303

Description of Change:

Installation of refrigerant dryer assembly on the turbine, reactor and radwaste building chillers.

Summary:

- I. No. The chillers have no safety-related function, and this modification has no effect on any other safety-related systems.
- II. No. See I above.
- III. No. These chillers have no basis in the Technical Specifications.

SER NO. 82-21

Cross Reference: Procedure OP-TY-005 Rev. 0

Description of Change:

Performance of ESW Waterhammer Test.

Summary:

- I. No. This test will be performed during initial fuel loading with the reactor cavity flooded and the spent fuel pool gates removed. ECCS systems are not required at this time. The ESW system will be operated under the provisions of Technical Specifications to support the operability of the diesel generators. Operation in this manner is within the limits imposed by existing FSAR analyses.
- II. No. If the test loop and associated equipment is declared inoperable, one loop will still be available and this condition has been addressed by the Technical Specifications.
- III. No. This test will be performed within the provisions of the Technical Specifications.

SER NO. 82-22

Cross Reference: PMR 82-278

Description of Change:

Replacement of flush metal door with a door with a window in turbine building airlock.

Summary:

- I. No. The design quality of construction and materials and the design function of the door is not altered. Secondary containment integrity will be maintained by the door on the Reactor Building side of the airlock if the replacement door fails.
- II. No. The design function of the door has not been changed. The construction and installation is of the same standards and therefore no new situations exist.
- III. No. The quality of this replacement door will allow Technical Specification limits on secondary containment integrity to be maintained.

SER NO. 82-23

Cross Reference: PMR 82-253

Description of Change:

Change name plates in control room panels which provide MSTV LCS indications.

Summary:

- I. No. This change enhances operator information. The design function of the devices remains unchanged.
- II. No. See I above.
- III. No. See I above.

SER NO. 82-24

Cross Reference: 82-142

Description of Change:

Human factors labeling changes to HVAC indications on control room panels.

Summary:

- I. No. The changes serve to enhance operator information and mitigate operator error. The function of actual HVAC systems are not altered by this modification.
- II. No. See I above.
- III. No. The function as defined in Technical Specifications of the systems related to the indications in question are not altered.



SER NO. 82-25

Cross Reference: PMR 81-030

Description of Change:

Removal of seal water low flow start permissive from circulating water pumps starting logic.

Summary:

- I. No. The circulating water system is not required for the safe shutdown of the plant.
- II. No. The reliability of the circulating water system is not decreased, as a mechanical contact is being replaced by a solid wire (jumper); therefore no new failures are postulated.
- III. No. The circulating water system is not required for safe plant shutdown and no Technical Specifications are affected by the change.

SER NO. 82-26

Cross Reference: PMR 82-136

Description of Change:

Addition of metallic impurity sampler in feedwater sample line; requires removal of block shield wall for installation.

Summary:

- I. No. The sampler addition will not affect the function of either the sampling system or the feedwater system. The sampling system is not safety-related and no safety-related system is affected by this change.
- II. No. The system function remains the same and no instrumentation nor any other system is affected adversely by this change.
- III. No. No system functions have changed (feedwater); therefore no margins of safety can be reduced.

SER NO. 82-27

Cross Reference: PMR 82-305

Description of Change:

Replacement of control structure HVAC circuit boards.

Summary:

- I. No. The FSAR safety analysis states that the subject valves are designed to maintain functional integrity during a DBA, by use of redundant components and controls to meet single failure criteria. This modification still meets the criteria, as it increases the reliability of the circuit board under DBA conditions because the new board has been upgraded to higher seismic and hydrodynamic qualification standards.
- II. No. See I above.
- III. No. No equipment used to form any basis in the Technical Specifications is affected by this modification.

SER NO. 82-28

Cross Reference: PMR 82-155

Description of Change:

Install piping to permit use of mobile radwaste processing equipment in the event that in-plant systems are unavailable.

Summary:

- I. No. The systems being modified are not safety-related. This modification is bounded by the existing FSAR analysis of failure of the Evaporator Concentrates Storage Tank. The new piping will not be subject to any uncontrolled release.
- II. No. The subject piping is similar to existing piping located in the truck bay originally designed for mobile processing. The new lines do not present an uncontrolled release path.
- III. No. The subject systems are not safety-related and are wholly contained in the radwaste building; therefore margins of safety are not affected.



SER NO. 82-29

Cross Reference: PMR 82-308

Description of Change:

Addition of radwaste solidification sampling system.

Summary:

- I. No. The new pump and sample tank serve the same tanks presently evaluated in the FSAR. The sample pump discharge does not present an uncontrolled release path, as it is presently served by existing liquid radwaste floor drains. The sampling system is not safety-related and does not impact safety-related equipment.
- II. No. No uncontrolled release path is present as a result of this change. The system is designed to the same criteria as similar process pumps and piping. The additional electrical load is non-essential.
- III. No. The insignificant affect of the additional electrical loading is outweighed by the better control process quality of the radwaste qualifications; therefore safety margin is not reduced.

SER NO. 82-30

Cross Reference: PMR 82-318

Description of Change:

Replacement of existing O-rings on CRD exhaust valves with material that can handle higher temperatures.

Summary:

- I. No. This modification will upgrade the present O-rings in order to provide better assurance that they will serve as a redundant pressure boundary in the event of vent valve seat leakage. This will decrease the probability of the "Decrease in Reactor Coolant Inventory" type of accident.
- II. No. This change is a one-to-one change; no new situations therefore arise.
- III. No. This replacement better insures that the CRD vent valves meet their operational requirements; margin of safety can only increase.

SER NO. 82-31

Cross Reference: PMR 82-322

Description of Change:

Sleeve relays on instrument air system to prevent post accident radiation damage.

Summary:

- I. No. The instrument air system is not safety-related as analyzed in the FSAR. This modification has no affect on that analysis.
- II. No. This change will increase the reliability of the non-safety related instrument air system.
- III. No. Margins of safety are not reduced because the system is not safety-related and does not prevent safe shutdown of the unit.

SER NO. 82-32

Cross Reference: PMR 82-323

Description of Change:

Addition of legs to sinks in reactor building decontamination rooms to provide seismic qualifications for supporting walls.

Summary:

- I. No. Seismic qualification will decrease both accident probability and consequences.
- II. No. This change will increase the reliability of the supporting walls; it does not create the possibility of any accident or malfunction of a different type than previously analyzed.
- III. No. Margins of safety have been increased via seismic qualification of the subject walls.



SER NO. 82-33

Cross Reference: PMR 81-019

Description of Change:

Removal of ladders in condenser water boxes.

Summary:

- I. No. Condenser water boxes are not safety-related and their integrity has not diminished due to this change.
- II. No. No new equipment has been installed which could create the possibility of an unanalyzed event.
- III. No. For the reasons specified in I above, margins of safety are not reduced by this change.

SER NO. 82-34

Cross Reference: PMR 81-129

Description of Change:

Redesign of the debris pit drain valve screen to allow cleaning when debris pit rake is out of service.

Summary:

- I. No. This change does not involve safety-related components nor does it impact safety-related systems. System function will improve by preventing valve clogging.
- II. No. The function of this system has been improved by preventing valve clogging when the debris pit rake is out-of-service in winter or for maintenance.
- III. No. This system is not safety-related and this modification will only improve its function by providing an alternate means of operating the screen wash system. Margins of safety as defined by the Technical Specifications are unaffected.



SER NO. 82-35

Cross Reference: PMR 82-169

Description of Change:

Installation of states links in the undervoltage trip schemes for all 4kV buses to provide test facilities for monthly surveillances.

Summary:

- I. No. The undervoltage trip logic for the 4kV bases is unaffected by this change. Test procedures will ensure closure of the states links post-surveillance so that FSAR evaluations will remain valid.
- II. No. The undervoltage trip logic has not been changed.
- III. No. This modification responds to Technical Specification surveillance requirements and makes them easier and safer to perform, as well as lessening the possibility of inadvertent trips during testing. Margins of safety are therefore improved.

SER NO. 82-36

Cross Reference: PMR 82-265

Description of Change:

Modification to allow a high vibration alarm to actuate prior to the turbine trip setpoint. They are simultaneous at present.

Summary:

- I. No. This system is not safety related. The original high vibration trip will occur in accordance with the FSAR. A new module will be installed to allow an annunciator alarm at a lower vibration amplitude than the trip setpoint.
- II. No. This modification is bounded by existing evaluations.
- III. No. Technical Specifications are unaffected by this change.

SER NO. 82-37

Cross Reference: PMR 82-307

Description of Change:

Replacement of process radiation instrument components to improve reliability.

Summary:

- I. No. This modification improves the reliability and repeatability of the stack monitors by upgrading controllers, transmitters and probes. The original design requirements have not been changed and no other systems are impacted.
- II. No. This modification increases reliability, decreases maintenance, impacts no other systems, and allows the monitor to perform its design function.
- III. No. The improved reliability of this system has been verified by factory testing and field experience. No margin of safety is adversely affected.

SER NO. 82-38

Cross Reference: PMR 82-317

Description of Change:

Replacement of leaking conductivity cells in the Makeup Demineralizer System.

Summary:

- I. No. This change has no effect on the operation of the system, nor does it impact any other safety-related system or component.
- II. No. See I above.
- III. No. The Makeup Demineralizer System is not addressed by the Technical Specifications.

SER NO. 82-39

Cross Reference: PMR 82-326

Description of Change:

Upgrade relay wiring and alarm reset pushbutton mounting spacers related to 4.16kV distribution system to meet environmental qualification requirements.

Summary:

- I. No. This modification corrects an existing condition which, if left uncorrected, could increase the consequences of an accident or an equipment malfunction as previously analyzed.
- II. No. This equipment improves the reliability of auxiliary equipment in the 4.16kV switchgear by upgrading it to stricter environmental standards.
- III. No. This change does not affect the basis for any Technical Specifications.

SER NO. 82-40

Cross Reference: PMR 82-335

Description of Change:

Improvement of 480 V Motor Control Center relay insulation to meet environmental qualification criteria.

Summary:

- I. No. This change is being implemented to correct an existing condition which, if left uncorrected, could increase the consequences of a presently analyzed accident or malfunction.
- II. No. By upgrading it to more stringent environmental standards, this auxiliary equipment in the 480 V MCC's has become more reliable.
- III. No. This modification is not addressed by the Technical Specifications.

SER NO. 82-41

Cross Reference: PMR 82-344

Description of Change:

Use of refueling platform junction box "as is" after repair with welded steel plate.

Summary:

- I. No. The FSAR fuel handling accident analyses are not affected by this modification. The repaired box performs its original function.
- II. No. The repaired box serves the identical function as the box in its original "pre-damaged" condition.
- III. No. No fuel handling equipment that forms the basis for any Technical Specification is affected by this modification.

SER NO. 82-42

Cross Reference: PMR 82-345

Description of Change:

Replacement of refueling bridge junction box with original design equipment.

Summary:

- I. No. FSAR fuel handling accident analyses are not affected by this modification. The box is being returned to its original design.
- II. No. The refueling bridge will function as originally designed after this modification.
- III. No. No fuel handling equipment that forms the basis for any Technical Specification is affected by this modification.

SER NO. 82-43

Cross Reference: PMR 82-347

Description of Change:

Replacement of refueling bridge power track links.

Summary:

- I. No. This modification does not affect any of the fuel handling related FSAR analyses. The bridge will function as originally designed.
- II. No. The bridge will function as originally designed; therefore no unevaluated conditions will result.
- III. No. No Technical Specifications are affected by this modification.

SER NO. 82-44

Cross Reference: PMR 82-348

Description of Change:

Permit the use of either the original design refueling bridge junction box or the repaired box with a welded back plate.

Summary:

- I. No. This modification has no effect on the fuel handling related FSAR analyses. The refueling bridge will function as previously designed.
- II. No. The bridge will function as previously designed after this modification; no new condition will result.
- III. No. Fuel handling equipment will operate as previously designed; no Technical Specifications will be affected by this change.



SER. NO. 82-45

Cross Reference: PMR 82-342

Description of Change:

Addition of starting resistors to limit the inrush current in the 250 VDC distribution system.

Summary:

- I. No. This modification only changes the values of existing resistors; it does not add new components. The change in starting current will not affect system voltage, load sequencing, battery capacity, motor life nor the load profile as presently analyzed in the FSAR.
- II. No. See I above.
- III. No. This modification does not impact the basis for any Technical Specification.

SER NO. 82-46

Cross Reference: PMR 82-343

Description of Change:

Addition of starting resistors to 250 VDC valve motors in HPCI and RHR systems.

Summary:

- I. No. This modification only changes the values of existing resistors; it does not add new components. The change in starting current will not affect system voltage, load sequencing, battery capacity, motor life nor the load profile as presently analyzed in the FSAR.
- II. No. See I above.
- III. No. This modification does not impact the basis for any Technical Specification.

SER NO. 82-47

Cross Reference: PMR 82-328

Description of Change:

Security System Card Reader timeout modification.

Summary:

- I. No. The security system is not safety-related and affects no safety-related systems.
- II. No. Malfunction of the security system has no impact on safety systems. Loss of the system will be handled by security contingency measures.
- III. No. The security system is not addressed by the Technical Specifications.

SER NO. 82-48

Cross Reference: PMR 82-203

Description of Change:

Change RWCU annunciator engraving on operating benchboard.

Summary:

- I. No. The FSAR analysis of the function associated with this annunciator is unaffected by this modification.
- II. No. This modification does not affect the design or function of RWCU; it simply enhances operator information.
- III. No. Margins of safety are unaffected for the reasons in II above.



SER NO. 82-49

Cross Reference: PMR 82-221/DCP 813

Description of Change:

Replacement of Agastat GP series relays with Agastat EGP series relays.

Summary:

- I. No. The EGP relay is functionally equivalent to the GP relay and is more reliable.
- II. No. This is a direct relay replacement with a more reliable type. It therefore will not increase possibility of malfunction.
- III. No. This action does not change the function or reduce the margin of safety of any system addressed in the Technical Specifications.

SER NO. 82-50

Cross Reference: PMR 82-304

Description of Change:

Replacement of Reactor Building airlock door seals.

Summary:

- I. No. The proposed change reduces these possibilities by protecting the door seals from personnel traffic with the door jams. The proposed modification will cause no security impact to security doors because closing and latching functions are unchanged. Secondary Containment Integrity will not be affected by the new seals.
- II. No. The installation method of the seals is being changed by this modification. The proposed seals, should they fail, are comparable to the failure of the existing seals.
- III. No. The proposed seals will not degrade the rating of any fire-rated door per NFPA 80 Chapter 2. Seal leakage will be verified to be within Technical Specification limits on reactor building drawdown time and air flow during operation of the Standby Gas Treatment system.



SER NO. 82-51

Cross Reference: PMR 82-363/FDDR KRI-608 Rev. 0

Description of Change:

Perform panel wiring changes for conformance to vendor requirements.

Summary:

- I. No. Wiring changes will allow certain line codes to be assigned to their originally assigned separation group. Neither the separation group nor any safety-related equipment is affected by this change.
- II. No. See I above.
- III. No. Divisional separation has not been violated and no design functions are affected do to this change.

SER NO. 82-52

Cross Reference: PMR 82-366/FDDR KRI-655 Rev. 1

Description of Change:

Replacement of temperature alarm switches with model redesigned to solve an internal heating problem.

Summary:

- I. No. The existing switches are being replaced with physically and functionally equivalent switches. Probability of failure is therefore no greater.
- II. No. No new functions have been introduced by this modification.
- III. No. Margin of safety has not changed since the replacement switches are functionally equivalent and no less reliable than the existing switches.

SER NO. 82-53

Cross Reference: DCP 647/PMR 82-365

Description of Change:

HPCI solenoid valve replacement with environmentally qualified valves.

Summary:

- I. No. The proposed action is a one-for-one replacement with a qualified valve which is more reliable. The valves are on the vacuum tank condensate pump discharge line and would only indirectly affect HPCI operation; they are therefore not explicitly discussed in the FSAR.
- II. No. The replacement decreases failure probability. The new valves meet all original design requirements for a Q, safety-related installation.
- III. No. The installation of environmentally qualified solenoid valves will not degrade system operability. Retention of the unqualified valves, with their risk of failure, would increase the probability of entering an LCO.

SER NO. 82-54

Cross Reference: PMR 82-314

Description of Change:

Installation of noise suppression capacitors to Reactor Recirculation MG set scoop tube control circuit.

Summary:

- I. No. This modification is to a non-Q circuit. The change returns the circuit to its design standards by reducing speed cycling of the MG sets due to circuit noise.
- II. No. This change corrects a non-Q deficiency. Failure of the capacitors would cause a scoop tube lockup. Repairs could occur at power, or manual control could be taken to change power level. A shutdown of one or both recirculation pumps is analyzed in the FSAR.
- III. No. The Technical Specifications address the loss of a recirculation pump; MG set speed cycling would require a shutdown of the pump(s). The noise suppression capacitors will eliminate this occurrence.

SER NO. 82-55

Cross Reference: PMR 82-080

Description of Change:

Addition of manually-operated, normally open block valves to water pretreatment level sensing lines.

Summary:

- I. No. Water pretreatment is a non safety-related system; it has no mechanical or electrical interlock with any safety-related system and this change creates no new interfaces with safety-related equipment.
- II. No. See I above.
- III. No. The water pretreatment system is not addressed in the Technical Specifications.

SER NO. 82-56

Cross Reference: PMR 82-324/DCP 773.1

Description of Change:

Core spray solenoid valve replacement to allow valve seating by gravity after testing.

Summary:

- I. No. This change does not increase the failure probability of the associated testable check valve. Consequences due to failure of both the new and old solenoid valves are the same. The actuator arm and linkages affected by this change can fail without impeding the check valve's capability to perform its safety function.
- II. No. See I above.
- III. No. This modification affects only the testable portion of the check valves; the safety-related function is unaffected.



SER NO. 82-57

Cross Reference: PMR 82-373

Description of Change:

Change voltage rating of heat tracing circuits.

Summary:

- I. No. This modification will allow the as-built plant to obtain the design value wattage. This change will have no adverse effects on the electrical distribution system.
- II. No. This modification makes the as-built condition of the plant consistent with the design analyzed by the FSAR.
- III. No. The modification will make the as-built plant consistent with design safety margins.

SER NO. 82-58

Cross Reference: Setpoint Change Request 82-030

Description of Change:

Change extraction steam bleeder trip valve pressure switch setpoints.

Summary:

- I. No. This change does not affect the established bleeder trip valve closure setpoint, which is the function discussed in the FSAR, i.e. protecting the turbine after a trip. This change allows the valves to open after turbine reset.
- II. No. This change will prevent excessive valve cycling which could impair reliability and thereby affect the protective function of the valve.
- III. No. These valves are not safety-related and are not addressed in the Technical Specifications.

SER NO. 82-59

Cross Reference: Setpoint Change No. 82-031, SFR-2969

Description of Change:

Change HPCI minimum flow opening setpoint.

Summary:

- I. No. The setpoint is based on protection of the HPCI pump bearings. The new setpoint is still within the vendor specification for all operating modes.
- II. No. Adjusting the valve opening setpoint within design limits does not affect the accident analysis.
- III. No. This setpoint is not directly addressed by the Technical Specifications; however, the reliability of HPCI, as defined via its operability requirements, will not be reduced.

SER NO. 82-60

Cross Reference: OP TY 006 Rev. 0

Description of Change:

Performance of ESW System Strain Measurement test.

Summary:

- I. No. During initial fuel loading, one operable ESW loop is required to support 2 diesel generators. This will be fulfilled during testing. The requirements reflect the limitations posed by previous analyses.
- II. No. The worst case failure would be a waterhammer rendering one loop inoperable. Only one loop is required for initial fuel load.
- III. No. All Technical Specification requirements will be fulfilled during this test.

SER NO. 82-61

Cross Reference: PMR 82-329

Description of Change:

Change cypher keypad card readers to non-keypad readers at various locations.

Summary:

- I. No. Security is not a safety-related system, nor does it interface with safety-related systems. This change simply allows a one-to-one replacement of card reader type.
- II. No. Loss of security system is covered by security contingency plans.
- III. No. The Technical Specifications do not address the security system and no margin of safety as defined in the Technical Specifications is reduced.

SER NO. 82-62

Cross Reference: PMR 82-369

Description of Change:

Routing of temporary cable to support thermal and vibration sensors associated with the Transient Monitoring System (TMS).

Summary:

- I. No. The temporary cable is not part of a safety-related system. Cable installation will not interfere with any safety systems.
- II. No. Cable tray support specifications are designed to handle the additional weight of the temporary cable. Cable tray fires are bounded by existing analyses in the FSAR.
- III. No. Margins of safety are not reduced due to this temporary modification.

SER NO. 82-63

Cross Reference: DCP 8153/PMR 82-367

Description of Change:

Improvement of room pressure seals to support reactor building HVAC design requirements.

Summary:

- I. No. Reactor Building HVAC will be consistent with the design characteristics described in the FSAR due to this modification. Reactor Building structural integrity is not compromised by this modification.
- II. No. The added sealing will not be located anywhere where it could cause an accident condition.
- III. No. Technical Specification margin of safety will be increased due to this change because contamination can be contained in Zone I.

SER NO. 82-64

Cross Reference: PMR 82-368/DCP 8137

Description of Change:

Reorientation of Reactor Building Main Steam pipeway door to allow a seating pressure, thereby maintaining design pressure in the pipeway.

Summary:

- I. No. This change creates consistency between the as-built condition and design requirements and therefore reduces such probabilities and consequences.
- II. No. This change will allow design pressure to be realized in order to support previous evaluation.
- III. No. The Technical Specifications do not specifically address these design requirements, but margins of safety can only improve due to this change.



SER NO. 82-65

Cross Reference: Test No. HF-92-001

Description of Change:

Performance of hot functional test to verify operation of the evaporator shell side level control system and drain tank level control system.

Summary:

- I. No. The Seal Steam System is not a safety-related system, and test operations will be within normal operating ranges.
- II. No. The system is maintained operable with a backup source of seal steam; level changes will be made within normal operating ranges.
- III. No. This system does not form the basis for a safety margin as defined in the Technical Specifications.

SER NO. 82-66

Cross Reference: Test No. HF-64-014

Description of Change:

Performance of Reactor Recirculation Flow Control System tune-up at Test Condition 3.

Summary:

- I. No. This testing ensures that the Recirculation Flow Control System will meet the ST-29 (Reference FSAR Chapter 14.0) acceptance criteria. The Open Loop tests, which are not included in ST-29, are bounded by the FSAR analysis on Failure of the MG Set Speed Controller (max demand), Subsection 15.4.5.
- II. No. This test will not cause the system to behave in any manner that has not been addressed in the FSAR.
- III. No. This test ensures that the Recirculation System will operate as designed. During testing, it will be operated within Technical Specification limits.

SER NO. 82-67

Cross Reference: PMR 82-360

Description of Change:

Reroute piping for offgas pretreatment radiation monitor to provide sufficient differential pressure for adequate flow.

Summary:

- I. No. This modification will allow the normal operation of the monitor.
- II. No. See I above.
- III. No. Margin of safety is unchanged. This modification will restore the monitoring system to operational status.

SER NO. 82-68

Cross Reference: PMR 82-355

Description of Change:

Realignment of limit switch allen screw holes associated with the Core Spray System.

Summary:

- I. No. Failure of the limit switch trip levers, which is mitigated by this change, affects valve position indication only. The check valves would still perform their safety function.
- II. No. See I above.
- III. No. Margin of safety is not reduced, because proper alignment of the set screws increases position indication reliability.

SER NO. 82-69

Cross Reference: PMR 82-378

Description of Change:

Rewiring changes associated with the Reactor Manual Control System.

Summary:

- I. No. The additional components from this modification are equivalent to existing materials used for similar purposes.
- II. No. See I above.
- III. No. Margins of safety are not reduced. This modification changes the process computer interface and an annunciator; these changes allow more consistent responses to the computer and greater operator awareness of system status.

SER NO. 82-70

Cross Reference: PMR 82-379

Description of Change:

Correct seismic qualification deficiency in RCIC turbine components (trip and throttle valve assembly, pedestal assembly).

Summary:

- I. No. The correct level of seismic qualification will enhance the dependability of the RCIC system.
- II. No. This is a one-for-one component replacement with parts of upgraded quality.
- III. No. Margin of safety is increased due to the increased reliability of RCIC.

SER NO. 82-71

Cross Reference: PMR 82-370

Description of Change:

Replacement of RCIC Turbine Temperature Accessories with accessories from a different vendor, therefore requiring a modification to the original configuration.

Summary:

- I. No. The modified instrumentation has no direct effect on safety, operability or reliability of the RCIC system. The modification does not alter the original design function of RCIC as described in the FSAR.
- II. No. See I above.
- III. No. The margin of safety is unchanged, because the modified instrumentation will perform the original design function.

SER NO. 82-72

Cross Reference: PMR 82-083

Description of Change:

Allow scram timing information from the Reactor Manual Control System to be connected to the GETARS transient monitoring system.

Summary:

- I. No. Both the CRD Scram Timing Panel and GETARS are data-gathering systems which are not safety-related. This change does not affect or interface with any safety-related systems.
- II. No. The added wiring due to this change will be installed per vendor (G.E.) approved specifications.
- III. No. Data collection systems do not affect any margins of safety as defined in the basis for the Technical Specifications.



SER NO. 82-73

Cross Reference: PMR 82-354

Description of Change:

Addition of metal oxide varistors across certain Reactor Protection System (RPS) relay coils to eliminate voltage spikes.

Summary:

- I. No. Neither failure mode of the variation (i.e. open or closed) will result in adverse consequences to the normal functioning of the RPS system. If the varistor self destructs, there is not enough heat or residue to cause adverse consequences.
- II. No. See I above. At most, a channel trip of RPS will result from varistor failure. This has been previously analyzed.
- III. No. Possible trips due to varistor failure (which is improbable due to the field history of the device) are outweighed by the trips caused by voltage spikes at present without varistors. Therefore, margin of safety is at worst unchanged.

SER NO. 82-74

Cross Reference: PMR 82-346

Description of Change:

Addition of motor operator to ESW pump discharge valves to enable throttling and mitigate water hammer effects on the system.

Summary:

- I. No. The entire electrical installation is Class 1E, as is the existing ESW electrical system. Redundancy provides protection against single failure of either the operators or their power supplies.
- II. No. Postulated failure modes due to the change were reviewed and none was found to result in an accident outside the envelope of FSAR analyses.
- III. No. The bases of Technical Specifications affected were reviewed and found to be unaffected by this change.

SER NO. 82-75

Cross Reference: PMR 82-228

Description of Change:

Installation of pressure regulator in CRD, RVCU and feedwater sample lines for flow control to dissolved oxygen cells.

Summary:

- I. No. This modification has no effect on the design function of the system. The change will allow proper operation of the cells by providing a constant flow to them.
- II. No. No failure due to the regulator is worse than the already analyzed sample line break.
- III. No. Addition of the regulator has no effect on system function. Therefore, system safety margin is unaffected.

SER NO. 82-76

Cross Reference: PMR 82-394

Description of Change:

Upgrade insulation of MDR relay coil pigtails.

Summary:

- I. No. This change corrects a deficient condition which could increase the consequences of an accident or a malfunction of equipment related to safety.
- II. No. The reliability of the relays is increased due to the wiring upgrade to more stringent environmental standards.
- III. No. The Technical Specifications do not address the components affected by this modification.



SER NO. 82-77

Cross Reference: PMR 82-396

Description of Change:

Relocation of MDR relays.

Summary:

- I. No. This change corrects a deficient condition which could increase the consequences of an accident or a malfunction of equipment related to safety.
- II. No. Equipment reliability is increased by this modification.
- III. No. The Technical Specifications do not address the components affected by this modification.

SER NO. 82-78

Cross Reference: PMR 82-353

Description of Change:

Removal of Reactor Recirculation Discharge Valve Actuator Motor Brakes, leaving position seating feature only.

Summary:

- I. No. All design concerns have been evaluated and shown not to affect the safety function of the valves, i.e. to close on a recirculation system suction side break. This function has always been accomplished by position seating.
- II. No. The position seating limit setpoint will be changed, but this has been analyzed and no concerns exist.
- III. No. See I and II above.

SER NO. 82-79

Cross Reference: PMR 82-304

Description of Change:

Replacement of door seals on the Reactor Building airlock doors.

Summary:

- I. No. The new seal will be less susceptible to damage from personnel traffic, as they will be protected by the door jambs. Secondary Containment Integrity, fire protection and security have been reviewed and are not adversely impacted by this change.
- II. No. This is a one-for-one replacement of door seals - therefore no new concerns exist.
- III. No. The new seals will be rated at least as high as the door they are used on with respect to fire protection standards. Secondary Containment integrity requirements will be verified consistent with current Technical Specification requirements.

SER NO. 82-80

Cross Reference: PMR 82-268

Description of Change:

Human factors changes to gaseous radwaste system control room panel.

Summary:

- I. No. Such concerns are reduced via the minimization of operator error. No system functions are altered by this change.
- II. No. See I above.
- III. No. See I above.



SER NO. 82-81

Cross Reference: PMR 82-009

Description of Change:

Change in location of backwash timers in River Intake Structure.

Summary:

- I. No. This is a non-safety related system. The change in location reduces instrument vibration. System function is unaffected by this modification.
- II. No. See I above.
- III. No. See I above.

SER NO. 82-82

Cross Reference: PMR 82-393

Description of Change:

Replacement of HPCI steam line drain pilot solenoid valves.

Summary:

- I. No. This change will restore the originally intended design. This change will be made when Reactor Steam Dome pressure is less than or equal to 150 psig and prior to criticality, which is a configuration when HPCI is not required by previous analysis.
- II. No. Previously intended quality standards will be achieved by this modification. This is a one-for-one replacement which presents no new concerns.
- III. No. The margin of safety is increased from the current configuration due to the installation of qualified pilot operators.

SER NO. 82-83

Cross Reference: PMR 82-306

Description of Change:

Addition of frequency transducer and resistor in main generator system panel.

Summary:

- I. No. The reliable supply of emergency power to essential busses is unaffected by any failure in the modified circuit.
- II. No. See I above.
- III. No. See I above.

SER NO. 82-84

Cross Reference: PMR 82-371

Description of Change:

Installation of protective relaying to detect 230kV circuit breaker flashover.

Summary:

- I. No. No essential busses are impacted by the failure of the 230kV main generator synchronizing circuit breaker. This breaker does not support any FSAR analysis.
- II. No. See I above.
- III. No. See I above. This equipment is not addressed in the plant Technical Specifications.

SER NO. 82-85

Cross Reference: PMR 82-359

Description of Change:

Addition of support bracket for a solenoid valve in the Reactor Recirculation System for equipment qualification purposes.

Summary:

- I. No. This modification will not change the function, operability, or reduce the reliability of the valve. Valve failure is in the fail-safe (closed) position.
- II. No. See I above.
- III. No. The addition of the support to the solenoid valve will increase the margin of safety.

SER NO. 82-86

Cross Reference: PMR 82-398

Description of Change:

Modification of recirculation system piping restraints.

Summary:

- I. No. The pipe restraint is being modified to its originally intended design function. If left unmodified, the capability of the restraint to prevent pipe whip is indeterminate.
- II. No. See I above. The reliability of the pipe restraint is improved due to this modification.
- III. No. The margin of safety will be improved by the prevention of pipe whip which could damage safety-related equipment.

SER NO. 82-87

Cross Reference: PMR 82-412

Description of Change:

Provide for spring tension adjustment on the RCIC Trip and Throttle Valve connecting rod.

Summary:

- I. No. This modification will improve reliability and thereby decrease such concerns.
- II. No. This modification is a one-for-one change with respect to the operational function of the RCIC system. Therefore no new concerns are created.
- III. No. Safety will be increased due to the increase in reliability.

SER NO. 82-88

Cross Reference: PMR 82-414

Description of Change:

Re-wire RCIC control system panel to correct terminations made in previous modification.

Summary:

- I. No. The implementation of this change increases the reliability of RCIC operation.
- II. No. See I above.
- III. No. The improved level of reliability increases the margin of safety.

SER NO. 82-89

Cross Reference: PMR 82-243

Description of Change:

Providing temporary power to radwaste mobile solidification system.

Summary:

- I. No. The worst case failure involving this modification is a loss of power to a non safety-related MCC; therefore this modification has no effect on FSAR analyses.
- II. No. Loss of a non safety-related MCC will not affect any equipment in a manner other than previously evaluated.
- III. No. The equipment affected by this change is not addressed in the Technical Specifications.

SER NO. 82-90

Cross Reference: PMR 82-395

Description of Change:

Provide 120 V AC power supply for spent resin tank flow transmitters.

Summary:

- I. No. The additional load is being added to a non safety-related power source.
- II. No. Failure of the instrument AC system has been evaluated previously in the FSAR.
- III. No. The 120 V AC Instrument AC system is not addressed in the Technical Specifications.

SER NO. 82-91

Cross Reference: PMR 82-346 (DCP 82-346B)

Description of Change:

Stagger start of ESW pumps and change in restart time of condensate pump post-LOCA.

Summary:

- I. No. The stagger start does not affect cooling of equipment nor electrical loadings. Delaying condensate pump restart time from 45 to 90 seconds has no impact since the pumps are not safety-related.
- II. No. The electrical loading scheme associated with the stagger start is acceptable as long as the condensate pump restart time is altered; again, no cooling problems are created by this change.
- III. No. The related Technical Specifications were reviewed and found to be unaffected by this change.

SER NO. 82-92

Cross Reference: PMR 82-422

Description of Change:

Change of scale on two indicators on Standby Information Panel.

Summary:

- I. No. These indicators are for backup information; neither were considered in any previous accident.
- II. No. The scale increments are being changed for familiarity to operating personnel. The meter function is not altered by the scale change.
- III. No. The indicators provide a backup indication of flow and are not addressed in the Technical Specifications.



SER NO. 82-93

Cross Reference: DCP 722.1 Rev. 0

Description of Change:

Revise SGTS logic so there is no auto switchover on a high radiation signal.

Summary:

- I. No. This switchover feature was not included in the FSAR safety analysis on SGTS. A reduction in switchover challenges will increase SGTS reliability.
- II. No. See I above. The safety-related design basis of SGTS is unaffected by this change.
- III. No. The Technical Specifications on SGTS are unaffected by this change; the affected instrument system is not addressed by the Technical Specifications.

SER NO. 82-94

Cross Reference: PMR 82-424

Description of Change:

Addition of annunciator circuit for SPOTMOS.

Summary:

- I. No. This circuit will provide the operator with information of suppression pool temperature problems. It will not change the function, operability or reliability of the system.
- II. No. None of the input parameters or initial conditions related to evaluations associated with this system are different due to this modification.
- III. No. Margin of safety can only increase due to increased operator awareness.

SER NO. 82-95

Cross Reference: PMR 82-356

Description of Change:

Modify relay contacts to allow Reactor and Turbine Building Chillers to trip on loss of power.

Summary:

- I. No. The Reactor and Turbine Building Chillers have no safety-related functions.
- II. No. See I above.
- III. No. This equipment is not addressed in the Technical Specifications. See I above. It also does not interact with any other systems that are addressed in the Technical Specifications.

SER NO. 82-96

Cross Reference: PMR 82-176

Description of Change:

Provide freeze protection for River Intake Structure Level Transmitter.

Summary:

- I. No. The River Water Makeup System is not safety-related and its function is unchanged.
- II. No. See I above.
- III. No. The River Water Makeup System is not addressed in the Technical Specifications.

SER NO. 82-97

Cross Reference: PMR 82-288

Description of Change:

Remounting of 4kV undervoltage relays in the system for the purpose of achieving seismic qualification.

Summary:

- I. No. This modification will improve a deficient condition by ensuring proper qualification of the safety-related equipment.
- II. No. The new design is improved for both seismic and hydrodynamic loads; failure to implement the modification could result in the loosening of this mounting and subsequent impact on nearby equipment.
- III. No. Only the cabinet where the subject relays are mounted is affected by this change. No relays or adjacent equipment are being changed. Therefore no margin of safety is affected.

SER NO. 82-98

Cross Reference: PMR 82-393

Description of Change:

Qualification of HPCI pilot solenoid valves.

Summary:

- I. No. This modification, which restores the design intent of the HPCI system, will be performed when HPCI is not required to be OPERABLE.
- II. No. The valves are being replaced with better valves; no new concerns are introduced.
- III. No. The qualified valves will increase the safety margin of the HPCI system.

SER NO. 82-99

Cross Reference: PMR 82-438

Description of Change:

Addition of spacer and gasket to align prelube pump on diesel generator ("D") prelube line.

Summary:

- I. No. The seismic qualification of the lube oil and diesel auxiliary system is not affected by the subject change. The lubricating system operability is also unaffected, and the probability of diesel malfunction is not increased.
- II. No. Failure of this single diesel due to this modification meets the single failure criterion in that the other diesels are available to provide adequate power for safe shutdown.
- III. No. The margin of safety is unchanged for the reason in II above.

SER NO. 82-100

Cross Reference: PMR 82-187

Description of Change:

Movement of end stop on monorail of Reactor Building Equipment Access Door Hoist to eliminate the possibility of contact with a safety-related raceway.

Summary:

- I. No. This modification will prevent cabling for the HPCI, RHR and Core Spray systems from being affected by a suspended load. Therefore, previously evaluated malfunctions of safety-related equipment can be prevented.
- II. No. The modification simply serves to relocate an already existing restriction on crane travel.
- III. No. The margin of safety is not reduced, because a greater restriction is being applied which prevents the malfunction of safety-related equipment.



SER NO. 82-101

Cross Reference: PMR 82-430

Description of Change:

Drilling of holes into main turbine base plate for attachment of turbine expansion targets.

Summary:

- I. No. No previously evaluated accident is affected by this modification. The holes will have no structural integrity effects on the turbine, because the base plate supports no weight at the subject locations.
- II. No. As stated in I, the foundation of the main turbine is unaffected by this modification.
- III. No. The subject modification is not applicable to any Technical Specifications.

SER NO. 82-102

Cross Reference: PMR 82-427

Description of Change:

Replacement of fixed reset pressure switch in the extraction steam system with adjustable reset pressure switch.

Summary:

- I. No. This change involves a one-for-one pressure switch replacement. The new reset function will not affect any previous evaluations.
- II. No. See I above; the modification will not cause an increase in the probability of a Loss of Feedwater Heating Event.
- III. No. Bleeder trip valve closure time is not affected; therefore no margin of safety is affected.

SER NO. 82-103

Cross Reference: PMR 82-413

Description of Change:

Modification of MSIV-LCS drain line penetration from a non-flexible grouted penetration to a flexible seal.

Summary:

- I. No, for the following reasons: first, the subject seal is required only for prevention of the spreading of airborne radioactive contamination. The new seal will be subject to the same sealing criteria as the former seal. Secondly, precautions will be taken to prevent damage to the drain line during this modification. Third, there are no structural concerns related to the roof slab through which the drain line travels. Finally, the original pipe stress analysis analyzed the connected piping as free-moving.
- II. No. The new seal is perfectly by suitable for the subject application. See I above.
- III. No. A review of the Technical Specifications indicated no reduction in any specified safety margin.

SER NO. 82-104

Cross Reference: PMR 82-449

Description of Change:

Replacement of 10 Amp fuses with 20 Amp fuses in the HPCI System Topaz Inverter.

Summary:

- I. No. The larger fuse is consistent with vendor recommendations; therefore, ECCS reliability is increased due to this change.
- II. No. This is a one-for-one changeout with a more appropriately sized fuse, thereby increasing the current level of protection to a safety-related system.
- III. No. Reliability and safety margin are increased by this change, for the reasons described in I and II above.



SER NO. 82-105

Cross Reference: Setpoint Change Request 82-5.

Description of Change:

Change in setpoints of redundant thermostats in Standby Liquid Control System suction pipe heat tracing from 80°F to 75°F.

Summary:

- I. No. Previous evaluations take credit for a control room alarm on the loss of the subject heat tracing. The new setpoint will allow sufficient time for operator action to prevent precipitation because it is well above the saturation temperature of the Sodium Pentaborate solution. At the same time, it will allow the redundant thermostats to function only on the loss of the primary thermostats, instead of possibly initiating when not required.
- II. No. As stated in I above, the function and operability of the subject heat tracing is not affected in any way that could create a new concern.
- III. No. Neither the associated Technical Specification surveillance requirement nor its basis are affected in a manner that can affect the availability of power to the panel nor the operability nor function of the primary heat tracing.

SER NO. 82-106

Cross Reference: PMR 82-170

Description of Change:

Establishment of a link between SSES Plant Computer System and PP&L Power Control Center Computer System.

Summary:

- I. No. The subject system is not safety-related; this link is required only to supply the Power Control Center with SSES data.
- II. No. See I above. Plant operation is unaffected by the inoperability of this communication link.
- III. No. See II above.

SER NO. 82-107

Cross Reference: PMR 82-274

Description of Change:

Replacement of control structure fan belts.

Summary:

- I. No. The subject fans will meet their design intent to maintain cooling requirements within specified limits, and to maintain positive pressure in the control structure.
- II. No. This one-for-one change will simply reduce fan vibration.
- III. No. The subject fans are not addressed by the Technical Specifications.

SER NO. 82-108

Cross Reference: SCR 82-049

Description of Change:

Change of the setpoint on Control Structure H&V differential pressure switch.

Summary:

- I. No. The setpoint change ensures that the CREOASS fans will maintain their design flow rate, thereby meeting their design basis of keeping a positive pressure to preclude air inleakage.
- II. No. See I above. Only the CREOASS fans are affected by this change.
- III. No. No requirement in the Technical Specifications (or bases thereof) is altered by this change.



SER NO. 82-109

Cross Reference: PMR 82-404/DCP 741

Description of Change:

Splitting of common 28VDC supply bus to all control room inner-ring panels and installation of in-line fuses.

Summary:

- I. No. This modification prevents the common mode failure of the non-safety-related annunciator system.
- II. No. Any failure due to this modification would affect the power supply to a section of non safety-related annunciators.
- III. No. No margin of safety as defined in the Technical Specifications will be affected by the changes described above.

SER NO. 82-110

Cross Reference: PMR 82-456

Description of Change:

Addition of rheostats in series with certain diesel generator system sensing circuit relays to increase their pick up voltage.

Summary:

- I. No. The rheostats will be seismically qualified and mounted per Class 1E criteria. Having the voltage to the regulator applied at a higher potential ensures that the regulator and diesel generator will operate in accordance with their previously evaluated design.
- II. No. The new equipment will be Class 1E, and the higher pick up voltage does not affect the diesel generator capability to attain rated voltage, frequency and loading time as previously evaluated in the FSAR.
- III. No. This change ensures that the diesel generator is capable of functioning as designed.

SER NO. 82-111

Cross Reference: PMR 82-481

Description of Change:

Addition of testability feature to remote shutdown panel suppression chamber air temperature indicator.

Summary:

- I. No. This modification affects the test mode of operation only. It has no impact on the indicator circuitry.
- II. No. This modification does not change the results of any previous analysis; see I above.
- III. No. The subject temperature indicator is required to be OPERABLE by the Technical Specification. This modification aids in the verification of its operability.

SER NO. 82-112

Cross Reference: PMR 82-245

Description of Change:

Installation of additional drain pot in offgas treatment system.

Summary:

- I. No. The offgas system is not safety-related. Therefore failure of any piping associated with this modification will not impact a safety system. Non-implementation could result in degraded reliability of downstream HEPA filters. This design is consistent with existing codes and standards.
- II. No. The design is consistent with existing drain pots. Redundant level switches prevent the creation of an offgas flowpath to the liquid radwaste sump by preventing the loss of a water seal.
- III. No. No equipment related to the margin of safety associated with the offgas system is affected by this modification.

SER NO. 82-113

Cross Reference: PMR 82-463

Description of Change:

Installation of blocking devices in the containment purge supply and exhaust valve operators.

Summary:

- I. No. The purge system is not safety-related, in that it is not required for safe shutdown. This modification will not affect the capability of the subject valves to isolate when required.
- II. No. The blocking devices will affect only the opening of the operators and valves. Spring closure is unaffected and is the fail safe condition of the valves.
- III. No. The Technical Specifications require the blocking limit. The margin of safety requires assurance of closure; this modification will not inhibit that function.

SER NO. 82-114

Cross Reference: EWR 820534/PMR 82-245

Description of Change:

Temporary operation of the offgas system without the inlet HEPA filters.

Summary:

- I. No. The purpose of the filters is to trap radioactivity associated with fuel leakage. This operation will be allowed only up to and including 5% power, when leakage is minimal. Any particulate would drop out in the chiller drain pot and be routed back to the LP condenser. Any not removed will be picked up by the charcoal guard beds.
- II. No. See I above.
- III. No. Any particulate normally trapped by the HEPA filters will drop out further downstream (see I above). No particulates will be released to the turbine building exhaust vent, so the margin of safety is not reduced.

SER NO. 82-115

Cross Reference: PMR 82-488

Description of Change:

Additions to circuitry of Transient Monitoring System on HPCI to improve operation of TMS.

Summary:

- I. No. These modifications affect the secondary HPCI pressure-related indications. The primary indication is flow and it is not affected by this modification.
- II. No. Failure of the subject indicating loop will not affect the design intent of the HPCI system. HPCI control, isolation logic and flow indication are not affected.
- III. No. As stated above, failures due to this modification have no effect on HPCI performance, and therefore have no effect on safety margin.

SER NO. 82-116

Cross Reference: PMR 82-487

Description of Change:

Removal of low reactor vessel pressure from CS and LPCI pump start logic for one unit operation only. Modify operating procedures on SGTs and Control Room Fresh Air in order to maintain acceptable voltages under emergency conditions.

Summary:

- I. No. The injection logic for the CS and LPCI systems is unchanged by this modification. This change reduces the probability that the startup of the CS, LPCI and ESW pumps will cause an undervoltage situation. The procedural controls have no effect on previous evaluations.
- II. No. The original evaluations in the FSAR do not consider the low reactor vessel pressure permissive on the pump start logic.
- III. No. The Technical Specifications do not require a low pressure permissive on the pump start logic, only injection valve opening. Therefore safety margin is not reduced.

SER NO. 82-117

Cross Reference: PMR 82-479

Description of Change:

Providing throttling capability to main turbine gland sealing system valves.

Summary:

- I. No. The malfunction of the subject system is analyzed in the FSAR. This modification will not increase the probability of nor the consequences of this malfunction. The valves in question have no automatic isolation function to the system.
- II. No. See I above.
- III. No. The steam seal system is not elemented to any basis for any Technical Specification.

SER NO. 82-118

Cross Reference: PMR 82-375A

Description of Change:

Installation of conduit, cables, instruments and control panels to facilitate modification requiring a change to the Technical Specifications (final modification to be approved only after approved Technical Specification change).

Summary:

- I. No. The only safety system affected by this support work is Secondary Containment, which will be maintained by normal controls within Technical Specification limits.
- II. No. See I above. Considerations for thermal interference, electrical separation, etc. have been incorporated in the design.
- III. No. Operation outside of design or operational limits will not occur due to this change.

SER NO. 82-119

Cross Reference: PMR 82-349

Description of Change:

Installation of time delay in CRD pump low suction pressure trip circuit.

Summary:

- I. No. The CRD pumps are not safety-related nor considered a make-up source to the vessel in previous analysis. The time delay will decrease their probability of tripping.
- II. No. See I above. The installation will consider environmental qualification, electrical separation, etc.
- III. No. The operability of the CRD pumps is not necessary to support the basis for any Technical Specification margin of safety.

SER NO. 82-120

Cross Reference: Test No. HF-93-006

Description of Change:

Pressure Control System Tuneup at Test Condition 1.

Summary:

- I. No. This test method is essentially the same as that used in the system Startup Test, with the major distinction being the step inputs, which are smaller or equal to the ST.
- II. No. See I above.
- III. No. Since the "bounding" ST was previously evaluated in the FSAR, no reduction in safety margin exists.

SER NO. 82-121

Cross Reference: Test No. HF-93-030

Description of Change:

Main Turbine EHC: Pressure Regulator Operation Verification.

Summary:

- I. No. The Turbine EHC system is not safety-related.
- II. No. This test will not place the plant in a condition leading to accident nor malfunction.
- III. No. This system is not directly related to any basis for margin of safety. Operation outside the constraints of the safety analysis will not occur.

SER NO. 82-122

Cross Reference: Test No. HF-92-050

Description of Change:

Main steam supply to steam seal evaporator pressure control verification.

Summary:

- I. No. This test optimizes system operation, thereby decreasing the probability of malfunction of the Main Turbine Gland Sealing System as previously evaluated.
- II. No. This test will not create a situation that would not be bounded by previous FSAR analysis.
- III. No. Test failure causes no impact to the basis for any Technical Specification.

SER NO. 82-123

Cross Reference: PMR 82-426

Description of Change:

Replacement of pressure transmitters in Control Structure and Reactor Building H&V systems and SGTS.

Summary:

- I. No. The transmitters are being replaced with environmentally qualified transmitters, thereby decreasing the possibility of equipment malfunction.
- II. No. This modification is a part-for-part changeout that does not affect system operation, other than to improve its reliability.
- III. No. Since the change does not affect system operation, no related Technical Specifications are impacted.

SER NO. 82-124

Cross Reference: PMR 82-346

Description of Change:

Stagger start of ESW pumps.

Summary:

- I. No. The stagger start does not affect the cooling capability of ESW nor does it adversely affect diesel generator loading or the 4kV system if offsite power is available.
- II. No. See I above.
- III. No. The items mentioned in I above are the integral ones in developing the safety margin. None are adversely affected.

SER NO. 82-125

Cross Reference: PMR 82-315

Description of Change:

Addition of valves to the hotwell drain flanges and installation of blind flanges on the outside of the valves.

Summary:

- I. No. No analysis associated with Decrease in Reactor Coolant Inventory nor the Loss of Condenser Vacuum is affected by this change. In addition, the valve/blind flange arrangement provides redundant isolation for any leakage past the hotwell/valve flange.
- II. No. Any equipment failures associated with this modification are bounded by the evaluations referenced in I above.
- III. No. Condenser integrity is required by the bases for Technical Specifications; this modification does not reduce the margin of safety to maintain that integrity.

SER NO. 82-126

Cross Reference: PMR 82-460

Description of Change:

Seismic qualification of solenoid pilot valves on various systems via the installation of a stiffening bracket.

Summary:

- I. No. This modification will support previous evaluations on seismic and environmental qualification.
- II. No. The brackets will increase system integrity during a seismic or hydrodynamic event. Operation of the valves is not affected.
- III. No. The Technical Specifications are not affected by this modification; however, as described above, safety margin will be increased.

SER NO. 82-127

Cross Reference: PMR 82-494

Description of Change:

Radwaste Evaporator Level Transmitter relocation.

Summary:

- I. No. Current evaluations bound any failure due to this modification, which will alleviate a clogging problem.
- II. No. See I above. Components of compatible quality standards will be used in this modification.
- III. No. Safety-related systems are unaffected by this modification.

SER NO. 82-128

Cross Reference: SCR 82-095

Description of Change:

Setpoint change on Reactor Building H&V Zone III differential pressure controller.

Summary:

- I. No. The setpoint change does not allow the design basis of the system to be adversely effected. Design pressure boundaries will be maintained such that unfiltered air does not leave the reactor building.
- II. No. See I above. No hardware changes are under consideration.
- III. No. The requirement for Secondary Containment Integrity will be met with this change installed.

SER NO. 82-129

Cross Reference: PMR 82-448

Description of Change:

Flex grounding of various RPS cables.

Summary:

- I. No. This modification ensures that safety-related systems will not fail due to a simple common fault from separate safety-related systems.
- II. No. See I above.
- III. No. For the reason in I above, margin of safety is increased.

SER NO. 82-130

Cross Reference: PMR 82-525

Description of Change:

Electrical separation of scram discharge volume vent and drain pilot valve switches.

Summary:

- I. No. This modification will achieve consistency with requirements concerning separation of RPS power supplies. No previous analyses are affected by this change.
- II. No. This modification eliminates the possibility of power supply cross feeding; it does not create new modes of failure.
- III. No. Failures associated with this modification cannot prevent any related system from performing its safety-related function.

SER NO. 82-131

Cross Reference: PMR 82-400

Description of Change:

Rework of cable in the Bypass Indication System.

Summary:

- I. No. The rework will bring the cable run back into design specifications; it will therefore allow consistency with previous evaluations.
- II. No. Both shorting and open circuitry have been previously evaluated. The addition of two junction boxes does not introduce any new failure modes.
- III. No. See I above.

SER NO. 82-132

Cross Reference: PMR 82-447

Description of Change:

Flex and ground on four RPS cables.

Summary:

- I. No. This modification will help to prevent safety-related systems from functioning improperly as a result of abnormal operation of some separate system. It is therefore important to previous single failure evaluations.
- II. No. See I above.
- III. No. See I above.



SER NO. 82-133

Cross Reference:

Description of Change:

Circuit rework to allow proper operation of the Transient Monitoring System on the RCIC system.

Summary:

- I. No. This change has no impact on previous safety analyses because it only affects a pressure indicating loop. (The primary indicator is flow for the RCIC system). System operation is unaffected.
- II. No. Loss of pressure indication does not impact RCIC control or isolation logic.
- III. No. Since the design and operation of the RCIC system are unaffected, no margin of safety is reduced.

SER NO. 82-134

Cross Reference: PMR 82-542

Description of Change:

HPCI pump discharge flow indicator replacement.

Summary:

- I. No. The change allows proper flow indication in the control. The safety function of the HPCI system is unaffected by this change.
- II. No. See I above.
- III. No. HPCI safety margin is unaffected as stated in I above. No other Technical Specifications are affected by this modification.

SER NO. 82-135

Cross Reference: PMR 82-375B

Description of Change:

Installation of auxiliary materials in preparation of final design change which is contingent upon Technical Specification change approval by NRC.

Summary:

- I. No. The only safety system affected by these modifications is secondary containment. Breaches of this system will be controlled in accordance with the Technical Specifications.
- II. No. See I above. Considerations such as thermal interference, electrical separation, etc. have been incorporated.
- III. No. The safety margin prescribed in the Technical Specifications will be met by meeting the requirements for secondary containment integrity.

SER NO. 82-136

Cross Reference: PMR 82-545

Description of Change:

Removal of unit separation boundary on MCC circuit breakers.

Summary:

- I. No. This change restores the system to the configuration for which it was previously evaluated, i.e., two unit separation.
- II. No. See I above.
- III. No. See I above.

SER NO. 82-137

Cross Reference: PMR 82-245B

Description of Change:

- Installation of offgas system piping supports.

Summary:

- I. No. The offgas system is not safety-related; failure of the piping or hangers will not affect a safety-related system.
- II. No. Worst case failure could lead to leakage of radwaste into the pipe tunnel. This has been previously evaluated in the FSAR.
- III. No. This modification will not reduce safety margins for the reasons above.

SER NO. 82-138

Cross Reference: PMR 82-172

Description of Change:

- Installation of data link between the PCS and the EOF.

Summary:

- I. No. The PCS is not safety-related. The required conduit runs and cable pulling will take place in the EOF, which precludes safety systems from being impacted.
- II. No. See I above.
- III. No. No part of the PCS is required to support the basis of any safety limit in the Technical Specifications.

SER NO. 82-139

Cross Reference: PMR 82-375C

Description of Change:

Change the trip logic for drywell coolers, instrument gas compressors and instrument air compressors so that they will not be interrupted on L2 or High Drywell pressure, and so that they will auto restart after a LOOP. The subject valves will be given an L1 and/or High Drywell pressure isolation.

Summary:

- I. No. Operation of this equipment is not required for safe shutdown. LOCA analyses and diesel generator loading evaluations are not adversely affected by the change. The change from L2 to L1 does not adversely impact the offsite dose analysis.
- II. No. See I above.
- III. No. This system is required to be operable by the plant Technical Specifications, but its loss affects only availability, not safety. A Technical Specification change is necessary to support installation of this modification.

SER NO. 82-140

Cross Reference: PMR 82-480

Description of Change:

Installation of station water cooling pipe hangers.

Summary:

- I. No. The subject system is auxiliary to the main generator and has no safety function. Abnormal vibration in the line will be reduced due to this modification.
- II. No. A malfunction will, at worst, result in a turbine trip, which has been previously evaluated.
- III. No. The subject system has no part in forming the basis for a margin of safety.



SER NO. 82-141

Cross Reference: DCP 10010/PMR 82-492

Description of Change:

Strengthening of main stop valve support/restraint.

Summary:

- I. No. This modification will reduce the consequences of accidents which impose loads on the subject piping.
- II. No. See I above.
- III. No. The increase in the capability of the piping to resist loads will increase safety margin.

SER NO. 82-142

Cross Reference: PMR 82-548

Description of Change:

Replacement of butterfly valves in the gaseous radwaste recombiner system.

Summary:

- I. No. The system is non-safety-related. Valve replacement will increase overall system reliability.
- II. No. This action involves a one-for-one replacement of inferior valves with valves of a better design.
- III. No. System reliability is improved due to this change.

SER NO. 82-143

Cross Reference: PMR 82-549

Description of Change:

Replacement of butterfly valves in the circulation water system.

Summary:

- I. No. The system is not safety-related. Valve replacement will increase overall system reliability.
- II. No. This action involves a one-for-one changeout of inferior valves with valves of a better design.
- III. No. System reliability is improved due to this change.

SER NO. 82-144

Cross Reference: PMR 82-565

Description of Change:

Replacement of butterfly valves in the Turbine Building Chilled Water System.

Summary:

- I. No. The system is not safety-related. Valve replacement will increase overall system reliability.
- II. No. This action involves a one-for-one changeout of inferior valves with valves of a better design.
- III. No. System reliability is improved due to this change.

SER NO. 82-145

Cross Reference: PMR 82-543

Description of Change:

Drill hole in drain plug of Reactor Recirculation pump motor leak detection switch.

Summary:

- I. No. This change will prevent false alarms and prevent sending personnel into the area to drain the switch cavity.
- II. No. This change has no affect on the safety-related recirculation pump itself, only the motor. No other safety-related equipment is affected by the change.
- III. No. A more reliable leak detection capability will be provided due to this modification.

SER NO. 82-146

Cross Reference: PMR 82-570

Description of Change:

Modification to RWCU pump "B".

Summary:

- I. No. The subject modifications will ensure pump operability. All the modifications include part-for-part changes consistent with the original design but improving the function of the pump.
- II. No. See I above.
- III. No. Since no new functions are created, operation within the safety margin defined in the bases for the Technical Specifications is not changed.

SER NO. 82-147

Cross Reference: PMR 82-563A

Description of Change:

Addition of time delay to spray pond bypass valves start logic.

Summary:

- I. No. The subject time delay relay is Class 1E. The worst case failure due to this modification is bounded by loss of one ESW loop, which is within previous design evaluations.
- II. No. See I above.
- III. No. See I above.

SER NO. 82-148

Cross Reference: PMR 82-429

Description of Change:

Addition of hanger supports to EHC tubing lines.

Summary:

- I. No. The EHC system is not essential to plant safety. Failure of the subject lines will cause a turbine trip, which has been previously analyzed.
- II. No. See I above. The new supports will decrease the probability of line failure.
- III. No. The basis for the Turbine Overspeed Protection Technical Specification is unaffected by this change which improves safety margin by improving system reliability.

SER NO. 82-149

Cross Reference: PMR 82-541

Description of Change:

Hanger relocation to mitigate piping interferences in EHC system.

Summary:

- I. No. The new hanger is not necessary to support any FSAR evaluation. The structural capacity of the hanger is better than in the previous configuration due to this change.
- II. No. See I above. Capacity is improved and the identical strut materials and construction details will be followed.
- III. No. This hanger is not necessary to support any Technical Specification basis.

SER NO. 82-150

Cross Reference: PMR 82-530

Description of Change:

Installation of permanent hanger to replace temporary support on moisture separation piping.

Summary:

- I. No. The moisture separator has no safety-related function. The hanger support will increase the reliability of the main turbine protective trip system.
- II. No. See I above.
- III. No. See I above.

SER NO. 82-151

Cross Reference: PMR 82-346

Description of Change:

Modification to ESW valves from open/close to just open.

Summary:

- I. No. These valves normally open on pump start. The chiller condenser will not be adversely affected by leaving the valves open with ESW on. Water hammer loads will be mitigated due to this change.
- II. No. See I above.
- III. No. See I above.

SER NO. 82-152

Cross Reference: PMR 82-586

Description of Change:

Staking of condenser tube bundles.

Summary:

- I. No. The main condenser is not safety-related. Should a failure occur it is bounded by previous decrease in reactor coolant inventory evaluations.
- II. No. See I above. Also, should a loosening of the stake result in tube rupture, there is no radiological hazard due to the inleakage created by the condenser vacuum.
- III. No. This modification will not impact the level of condenser integrity required to maintain safety margin.



SER NO. 82-153

Cross Reference: PMR 82-585

Description of Change:

Addition of welds to pipe support assembly.

Summary:

- I. No. This modification will correct a previous design deficiency, thereby achieving consistency with previous design evaluations.
- II. No. The additional welds create an improved design without creating new modes of failure.
- III. No. See I and II above.

SER NO. 82-154

Cross Reference: PMR 82-557

Description of Change:

Relocation of pressure switch in the Solid Radwaste System.

Summary:

- I. No. The solid radwaste system is not safety-related. This modification does not change its capability to contain radioactive material.
- II. No. See I above.
- III. No. See I above.

SER NO. 82-155

Cross Reference: PMR 82-587

Description of Change:

Addition of deflectors to bundle side of condenser bypass headers.

Summary:

- I. No. The main condensers are not safety-related. This modification will not create any missiles that would increase the consequences of a previous evaluation.
- II. No. See I above. Condenser tube failure is bounded by previous evaluations.
- III. No. The level of condenser integrity required to support the current safety margin is not reduced due to this modification.

SER NO. 82-156

Cross Reference: PMR 82-591

Description of Change:

Modification of snubber endplate.

Summary:

- I. No. This change will correct a previous design deficiency, thereby achieving consistency with previous evaluations.
- II. No. See I above.
- III. No. For the reason in I above, the margin of safety will be unchanged.

SER NO. 82-157

Cross Reference: PMR/DCP 81-067

Description of Change:

Installation of drainage line between the chemical drain tank room sump to the liquid radwaste drainage system.

Summary:

- I. No. The modified piping is not safety-related. Failure of the subject piping will not impact any safety-related system. Structural concerns due to the need to imbed the piping have been evaluated and do not create a concern.
- II. No. See I above.
- III. No. See I above.

SER NO. 82-158

Cross Reference: FMR 82-555

Description of Change:

Replacement of valve actuator seals in solid radwaste valves.

Summary:

- I. No. The modified equipment is not safety-related, and does not impact safety-related systems. The system function is unchanged due to this modification.
- II. No. These seals do not function as a pressure boundary; their reliability will be increased due to this change.
- III. No. No margin of safety is dependent on the subject seals.



SER NO. 82-159

Cross Reference: PMR 82-592

Description of Change:

Elimination of dissimilar weld in Condensate Demineralizer system.

Summary:

- I. No. The system in question has no safety-related function; this modification has no effect on system operability.
- II. No. See I above.
- III. No. The subject system does not form the basis for any margin of safety in the Technical Specifications.

SER NO. 82-160

Cross Reference: Safety Evaluation No. NPE-82-TP-54-001

Description of Change:

Approval of ESW water hammer test procedure.

Summary:

- I. No. Previous analysis has shown that pipe stresses will not exceed code allowables and the conclusions can be reasonably extrapolated to the subject testing, together with the hold points in the procedure.
- II. No. Random failures associated with this test are covered by previous single failure evaluations. Also see I above.
- III. No. The appropriate Technical Specification limits will be applied for the duration of the testing.

SER NO. 82-161

Cross Reference: Test No. HF-78-026

Description of Change:

TIP Purge System Leak Rate Test.

Summary:

- I. No. The test will be a pressure drop from normal system pressure. No safety-related equipment operation will be impacted.
- II. No. The plant will not be placed in a previously unreviewed condition.
- III. No. See I and II above.

SER NO. 82-162

Cross Reference: PMR 82-375D

Description of Change:

Modification of drywell cooling system trip logic.

Summary:

- I. No. The proposed changes will not affect equipment needed for safe shutdown. Valves required to isolate on a LOCA signal will still do so. No previous FSAR evaluations are therefore compromised.
- II. No. See I above.
- III. No. See I above.

SER NO. 82-163

Cross Reference: PMR 82-260

Description of Change:

Flexing and grounding of cables in RPS and main steam systems.

Summary:

- I. No. This change will prevent improper functioning of safety-related systems due to abnormal operation of some separate system, i.e., avoid single failure.
- II. No. See I above.
- III. No. Margin of safety is increased by avoidance of single failure mechanisms.

SER NO. 82-164

Cross Reference: PMR 82-539

Description of Change:

Installation of emergency seal leakoffs from reactor feed pumps to liquid radwaste.

Summary:

- I. No. Neither the condensate nor feedwater system is safety-related. Any failure due to this modification is bounded by previous analyses on Loss of All Feedwater Flow and Decrease in Reactor Coolant Inventory.
- II. No. See I above.
- III. No. The Technical Specifications do not address the design or operation of the reactor feed pumps nor do they address the method of routing leakage to liquid radwaste.



SER NO. 82-165

Cross Reference: PMR 82-601

Description of Change:

Rework of panel OBC-590 heat tracing.

Summary:

- I. No. This rework will bring the panel into compliance with design specifications which were intended to be followed as part of the original design.
- II. No. See I above.
- III. No. Various systems in the Technical Specifications require freeze protection without defining specific requirements. The requirements are defined by the AE, and this modification is in accordance with his specifications.

SER NO. 82-166

Cross Reference: PMR 82-602

Description of Change:

Rework of panel OBC-593 heat tracing.

Summary:

- I. No. This rework will bring the panel into compliance with design specifications which were intended to be followed as part of the original design.
- II. No. See I above.
- III. No. Various systems in the Technical Specifications require freeze protection without defining specific requirements. The requirements are defined by the AE, and this modification is in accordance with his specifications.

SER NO. 82-167

Cross Reference: PMR 82-604

Description of Change:

Rework of panel OEC-595 heat tracing.

Summary:

- I. No. This rework will bring the panel into compliance with design specifications which were intended to be followed as part of the original design.
- II. No. See I above.
- III. No. Various systems in the Technical Specifications require freeze protection without defining specific requirements. The requirements are defined by the AE, and this modification is in accordance with his specifications.

SER NO. 82-168

Cross Reference: PMR 82-605

Description of Change:

Rework of panel IBC-292 heat tracing.

Summary:

- I. No. This rework will bring the panel into compliance with design specifications which were intended to be followed as part of the original design.
- II. No. See I above.
- III. No. Various systems in the Technical Specifications require freeze protection without defining specific requirements. The requirements are defined by the AE, and this modification is in accordance with his specifications.



SER NO. 82-169

Cross Reference: PMR 82-607

Description of Change:

Rework of panel IBC-191 heat tracing.

Summary:

- I. No. This rework will bring the panel into compliance with design specifications which were intended to be followed as part of the original design.
- II. No. See I above.
- III. No. Various systems in the Technical Specifications require freeze protection without defining specific requirements. The requirements are defined by the AE, and this modification is in accordance with his specifications.

SER NO. 82-170

Cross Reference: PMR 82-609

Description of Change:

Rework of panel IBC-592 heat tracing.

Summary:

- I. No. This rework will bring the panel into compliance with design specifications which were intended to be followed as part of the original design.
- II. No. See I above.
- III. No. Various systems in the Technical Specifications require freeze protection without defining specific requirements. The requirements are defined by the AE, and this modification is in accordance with his specifications.

SER NO. 82-171

Cross Reference: No PMR or DCP: Use of mobile radwaste processing system.

Description of Change:

Use of mobile radwaste processing system to solidify radioactive wastes.

Summary:

- I. No. No safety-related systems are impacted by the use of this equipment, and the probability of occurrence or the consequences of the bounding solid radwaste system evaluation in the FSAR, rupture of a radwaste tank, are not increased by its use.
- II. No. See I above. Also the system is acceptable for containment of radioactive material, minimization of radiation and exposure, waste solidification, electrical loading, crosstie of waste transfer lines, and fire protection.
- III. No. The mobile system can support normal operation, including anticipated operational occurrences, by processing solid radwaste in accordance with 10CFR50 Appendix A, GDC 60. The system is equivalent to the existing plant system in regards to 10CFR50.36a.

SER NO. 82-172

Cross Reference: PMR 82-642

Description of Change:

Diesel Generator Intercooler replacement.

Summary:

- I. No. The new intercoolers are less susceptible to corrosion, are seismically qualified, and are constructed to ASME Section III Class 3 standards. The operation of the diesels will remain consistent with the present FSAR design and analysis.
- II. No. This is a one-for-one intercooler replacement on each diesel with more reliable intercoolers.
- III. No. This change will correct a condition which has the potential to reduce the current safety margin by reducing the reliability of power supplies required for safe shutdown. It will ensure that the diesels are capable of operating as designed.

SER NO. 82-173

Cross Reference: PMR 82-595

Description of Change:

Sealing of penetrations in the main generator exciter house to prevent air inleakage.

Summary:

- I. No. Neither the penetrations nor the subject equipment are safety related.
- II. No. See I above.
- III. No. See I above.

SER NO. 82-174

Cross Reference: PMR 82-271

Description of Change:

Construction of walkway between the North gatehouse and the Training Center.

Summary:

- I. No. This modification has no interface with plant operations and is not safety-related.
- II. No. See I above.
- III. No. See I above.

SER NO. 82-175

Cross Reference: PMR 82-657

Description of Change:

Correction of pipe support weld deficiency.

Summary:

- I. No. This modification serves to restore the pipe support to the design condition previously evaluated in the FSAR.
- II. No. See I above. No unanalyzed condition will be created.
- III. No. See I above. Margin of safety is based on the original design requirements.

SER NO. 82-176

Cross Reference: PMR 82-658

Description of Change:

Correction of pipe support weld deficiency.

Summary:

- I. No. This support is non-safety related and Seismic Category II. This modification serves to restore the pipe support to the design condition previously evaluated in the FSAR.
- II. No. See I above. No unanalyzed condition will be created.
- III. No. See I above. Margin of safety is based on the original design requirements.

SER NO. 82-177

Cross Reference: PMR 82-670

Description of Change:

Cable pull to support additional ESW circuitry interlocks required to meet single failure criteria.

Summary:

- I. No. The Class 1E cables will be routed through Class 1E raceway of the same Division. The raceway capacity will not be exceeded due to this change.
- II. No. See I above.
- III. No. This cable routing is not addressed by the Technical Specifications.

SER NO. 82-178

Cross Reference: PMR 82-277

Description of Change:

Phase B S&A Building Modifications.

Summary:

- I. No. The construction will add a four story building adjacent to the existing S&A building, which is not safety-related. Underground safety-related equipment which could be impacted has been reviewed and neither construction nor building failure will affect it.
- II. No. See I above.
- III. No. See I above.

SER NO. 82-179

Cross Reference: DCP 82-485

Description of Change:

Replacement of non-qualified Reactor Recirculation discharge valve actuators.

Summary:

- I. No. The modified (qualified) actuator will perform the same function as the original. The design is consistent with original design requirements, so its safety-related function is not affected.
- II. No. See I above.
- III. No. No Technical Specification requirement is affected by this change.

SER NO 82-180

Cross Reference: FMR 82-584

Description of Change:

Provision of temporary undervoltage trip relaying scheme until Unit 2 fuel load.

Summary:

- I. No. This modification will ensure the prevention of excessive loading onto critical power supplies for Unit 1 LOCA equipment. Unit 1 response reliability to a LOCA is therefore improved during the Unit 2 test period.
- II. No. This modification affects Unit 2 breakers only, until Unit 2 fuel load. No Unit 1 equipment is affected.
- III. No. Unit 1 Technical Specifications require four operable Unit 1 4kV switchgear busses which are unaffected by this modification.

SER NO. 82-181

Cross Reference: PMR 82-669

Description of Change:

Resize fuse for Radwaste Solidification Sample Pump Control Circuit.

Summary:

- I. No. The circuit to be modified is not safety-related and the increased loading requiring a larger size fuse is within the capacity of the electrical system.
- II. No. See I above. The new fuse will provide proper overcurrent protection.
- III. No. See I above.

SER NO. 82-182

Cross Reference: PMR 82-171E

Description of Change:

Interim ERCS Video Link.

Summary:

- I. No. This modification is not safety-related. The proposed cable runs in non-safety related raceways and connects non-safety equipment.
- II. No. The link transmits information to the EOF; see I above.
- III. No. No Technical Specification is applicable to this change.

SER NO. 82-183

Cross Reference: NCR 82-1147

Description of Change:

Evaluation of existing condition: ganged re-opening of RBCW and LRW containment isolation valves.

Summary:

- I. No. This condition does not affect the safe shutdown of the plant nor the response of ESF system in accident conditions. Previous analyses reflected the existing condition. Previous analyses do not address long-term recovery, however, appropriate procedural controls restrict the inadvertent opening of a highly contaminated system due to the condition.
- II. No. See I above.
- III. No. Safe shutdown and accident mitigation are unaffected. The identified isolation valves will close upon receipt of an isolation signal.

SER NO. 82-184

Cross Reference: PMR 82-675

Description of Change:

Condensate Demineralizer system valve replacement.

Summary:

- I. No. The new valve has no effect on the operability of the regeneration system of the condensate demineralizers, which has no safety-related function.
- II. No. See I above.
- III. No. The subject system is not addressed in the Technical Specifications; this change will not reduce the margin of safety as defined in the Technical Specifications for any other system.

SER NO. 82-185

Cross Reference: PMR 82-660

Description of Change:

Removal of security cages on the Unit 2 Cooling Tower basin makeup valves.

Summary:

- I. No. This change removes a unit separation boundary, restoring the system to its design configuration.
- II. No. Unit 2 preoperational testing was considered as a mode of operation in the original design.
- III. No. See I above.

SER NO. 82-186

Cross Reference: PMR 82-661

Description of Change:

Removal of plug in Unit 2 Cooling Tower basin blowdown line.

Summary:

- I. No. This change removes a unit separation boundary, restoring the system to its design configuration.
- II. No. Unit 2 preoperational testing was considered as a mode of operation in the original design.
- III. No. See I above.

SER NO. 82-187

Cross Reference: PMR-656

Description of Change:

Addition of supports to RHR system pipe hanger.

Summary:

- I. No. This change will restore the hanger to the original design intent. This modification will be carried out in accordance with applicable codes and standards.
- II. No. See I above.
- III. No. As described in I above, this change will maintain the current margin of safety.

SER NO. 82-188

Cross Reference: PMR 82-272

Description of Change:

River Water Intake composite sampler installation.

Summary:

- I. No. This modification has no impact on any safety-related equipment used to support FSAR analyses, it is being done to gather information.
- II. No. See I above.
- III. No. This modification will facilitate compliance with a Technical Specification /ODCM requirement.



SER NO. 82-189

Cross Reference: Test No. TP-49-001

Description of Change:

RHR pump internal temperature verification test. This test will verify that the RHR pumps will operate for a minimum of 10 minutes without pump seal cooling and motor oil cooling from ESW.

Summary:

- I. No. This test will be performed within the constraints of the plant Technical Specifications. The pump will be available to perform an auto initiation if required; an operator will restore ESW flow if required.
- II. No. See I above.
- III. No. The LPCI mode of RHR will not be affected by this test such that it could not perform its safety function. See I above.

SER NO. 82-190

Cross Reference: PMR 82-171F

Description of Change:

Relocation of UMC/SPDS consoles and radio equipment in Technical Support Center; also addition of video copier for UMC and coaxial cables between panels in the TSC.

Summary:

- I. No. These changes are being made in response to Emergency Plan Drill results; no safety-related systems are impacted by these changes.
- II. No. See I above.
- III. No. Neither change as described in I above affects the margin of safety for any Technical Specification.

SER NO. 82-191

Cross Reference: PMR 82-659

Description of Change:

Increase in ESW loop low flow alarm time delays.

Summary:

- I. No. The subject relays are fail-safe, i.e. if they failed and a low flow condition existed, the alarm would come in, followed by operator action.
- II. No. If an alarm came in prematurely, an operator would initiate transfer of ESW, which is within design.
- III. No. The basis for the ESW Technical Specification is unaffected by this change.

SER NO. 82-192

Cross Reference: PMR 82-153

Description of Change:

Door hardware replacement.

Summary:

- I. No. This change has no affect on the function of the doors in question.
- II. No. This change simply replaces door knobs with levers.
- III. No. The doors are part of the Secondary Containment boundary, but this change has no effect on their capability to perform that function.

SER NO. 82-193

Cross Reference: PMR 82-376

Description of Change:

Installation of conduit to allow input of remote feedwater valve position to the Transient Monitoring System.

Summary:

- I. No. The purpose of this modification is to allow more operator information. These valves have no function in support of safe shutdown.
- II. No. See I above.
- III. No. See I above.

SER NO. 82-194

Cross Reference: PMR 82-119

Description of Change:

Provide protective enclosures for protection of seismic monitoring instrumentation.

Summary:

- I. No. The structural integrity of the concrete slab will not be adversely impacted due to the subject drilling or cutting of reinforcing bars, per the ACI Standard ACI 318-77. Control Room operators will be notified of this work which will activate the monitors.
- II. No. The expansion bolts have been designed to keep the enclosure in place. The enclosure will be painted with rust inhibiting paint to prevent rust-clogging of drains.
- III. No. System reliability is increased due to this modification; safety margin is therefore not reduced.



SER NO. 82-195

Cross Reference: PORC Meeting No. 82-217, 11/8/82

Description of Change:

Allow operation at levels not to exceed 35% power until a 30 day reserve supply can be restored to the Containment Instrument Gas system.

Summary:

- I. No. This level of power reflects the present 2-day supply. Worst case LOCA and LOOP events were reviewed and found acceptable assuming a 35% power level, i.e., the reactor could achieve safe shutdown. Possible malfunctions in the Containment Instrument Gas system were reviewed and no concerns were found.
- II. No. See I above. No hardware modifications are in progress; this SER affects power level only.
- III. No. The Technical Specification bases assume ADS availability upon loss of HPCI. A 35% power level assures this to be true. Containment Instrument Gas Isolation valves are unaffected by this reduced power.

SER NO. 82-196

Cross Reference: PMR 82-670B

Description of Change:

Modifications to correct common mode single failure in ESW system which affects the cooling to all four diesel generators.

Summary:

- I. No. This change will ensure adequate diesel cooling, while mitigating any water hammer effects. The FSAR LOCA analyses were evaluated, and with this modification, adequate core and containment cooling is maintained. This was confirmed in part by test.
- II. No. These changes do not affect any separation requirements for ESW, nor do they permit any single failure from disabling both loops of ESW.
- III. No. The basis for the ESW Technical Specifications are unaffected by this modification. No other related Technical Specifications which have their basis in the LOCA analyses in I above are affected.

SER NO. 82-197

Cross Reference: PMR 82-626

Description of Change:

Modification to LRW filter inlet piping and hangers to resolve cracking problem.

Summary:

- I. No. This modification, addition of weldolet and pipe supports, is being done to prevent failure of this non safety-related line.
- II. No. This change will create a functionally equivalent condition as compared to the originally evaluated design.
- III. No. The subject filter and piping is not addressed by the Technical Specifications in support of any margin of safety.

SER NO. 82-198

Cross Reference: PMR 82-751

Description of Change:

Addition of device to allow drainage of diesel generator jacket water drain line to hazardous waste collection point.

Summary:

- I. No. The device will be installed to the standards of the equipment it is associated with at a position downstream of the normally closed drain valve. This has no effect on diesel generator operation.
- II. No. See I above.
- III. No. This device will enhance diesel generator maintenance. The bases for their operation in the Technical Specifications will not be affected.

SER NO. 82-199

Cross Reference: PMR 82-357

Description of Change:

Conversion of security computer "alarms" to "messages".

Summary:

- I. No. This is a software modification (only) to a non-safety-related computer system.
- II. No. This modification is to be implemented on a system which cannot independently control the plant.
- III. No. The security computer has no effect on plant operation as governed by the Technical Specifications.

SER NO. 82-200

Cross Reference: AD QA 311

Description of Change:

Method of dewatering solid radwaste for offsite disposal.

Summary:

- I. No. The FSAR evaluation of the rupture of the worst case radwaste tank bounds any failure associated with the dewatering of a radwaste line per the subject method.
- II. No. See I above. Containment of radioactive material, liner drop accident, dewatering process, gas production, and radiation exposure were all evaluated and found to be acceptable.
- III. No. This method will reduce the amount of solid radwaste material released for offsite disposal. The proposed methodology has no adverse affect on the bases for the Technical Specifications or the associated safety margins.

SER NO. 82-201

Cross Reference: PMR 82-730

Description of Change:

Extension of drain line on Liquid Radwaste Evaporator condenser to facilitate maintenance.

Summary:

- I. No. Failure of the subject line would result in a leak pathway to the same floor drain to which the condenser is currently piped.
- II. No. See I above.
- III. No. No adverse effects on any safety-related system nor its associated Technical Specification will occur due to this modification.

SER NO. 82-202

Cross Reference: PMR 82-277A

Description of Change:

Provide drilled piers for the foundation of the new addition to the existing S&A building (Phase B modification).

Summary:

- I. No. The new addition has no safety-related functions, and its collapse will not affect any Category I structures. Safety-related duct banks and piping have been reviewed and are not impacted by the modification.
- II. No. See I above.
- III. No. See I above.

SER NO. 82-203

Cross Reference: PMR 82-280

Description of Change:

Provision of computer inputs for Residual Heat Removal Service Water (RHRSW) temperature elements.

Summary:

- I. No. This change removes a signal from a recorder which is difficult to read and places it in the computer where it is easily accessible. RHRSW outlet temperature availability is unaffected by this modification.
- II. No. This modification lessens the chance of RHR Heat Exchanger damage by enabling it to be more accurately monitored. These temperature elements are used during the Steam Condensing Mode only.
- III. No. The Technical Specifications do not address the Steam Condensing Mode of RHR operation. This change has no effect on the basis for any Technical Specification.

SER NO. 82-204

Cross Reference: PMR 82-743

Description of Change:

Building up of existing welds on Service Water pipe support.

Summary:

- I. No. The welds will be consistent with existing standards. This modification will restore the support to the originally evaluated design.
- II. No. See I above.
- III. No. Safety margin will be maintained due to this modification as specified in I above.

SER NO. 82-205

Cross Reference: PMR 82-745

Description of Change:

Building up of existing welds on Reactor Building chilled water pipe support.

Summary:

- I. No. The welds will be consistent with existing standards. This modification will restore the support to the originally evaluated design.
- II. No. See I above.
- III. No. Safety margin will be maintained due to this modification as specified in I above.

SER NO. 82-206

Cross Reference: PMR 82-747

Description of Change:

Building up of existing welds on chilled water pipe support.

Summary:

- I. No. The welds will be consistent with existing standards. This modification will restore the support to the originally evaluated design.
- II. No. See I above.
- III. No. Safety margin will be maintained due to this modification as specified in I above.

SER NO. 82-207

Cross Reference: PMR 82-750

Description of Change:

Building up of existing welds on RCIC system pipe support.

Summary:

- I. No. The welds will be consistent with existing standards. This modification will restore the support to the originally evaluated design.
- II. No. See I above.
- III. No. Safety margin will be maintained due to this modification as specified in I above.

SER NO. 82-208

Cross Reference: PORC Mtg. 82-234 11/24/82

Description of Change:

Evaluation of dewatering of solid radwaste for shipment offsite.

Summary:

- I. No. The current accident evaluation of the rupture of the worst case radwaste tank bounds any failure of a dewatering radwaste liner within the Radwaste Building.
- II. No. Based on acceptable reviews of the following: containment of radioactive material, line drop accident, dewatering process, gas production and radiation exposure.
- III. No. The proposed process is optional and will be used in support of other available processes. Solid radwaste release for offsite disposal can be reduced by the proposed method.

SER NO. 82-209

Cross Reference: PORC Mtg. 82-234 11/24/82

Description of Change:

Use of Mobile Radwaste Processing System for radwaste solidification.

Summary:

- I. No. The current accident evaluation of the rupture of the worst case radwaste tank bounds any failure of the system, which will be located in the Radwaste Building.
- II. No. Based on acceptable reviews of the following: containment of radioactive material, radiation exposure, solidification process, electrical loading, crosstie of waste transfer lines, fire protection, liner corrosion, use of cement, and ALARA.
- III. No. The mobile system is equivalent to the existing in-plant system, with respect to 10CFR50.36a. The amount of solid radwaste generated will be essentially the same as if the in-plant system was used.

SER NO. 82-210

Cross Reference: PMR 82-790

Description of Change:

Modification of the APRM printed circuit board logic to allow a direct input to the comparator from the LPRM output.

Summary:

- I. No. This change allows a less time consuming, more accurate adjustment of the power range monitoring system in response to an increase in the total core peaking factor. The operation and function of the system are not altered.
- II. No. See I above. This change affects only the means of adjusting power range system response.
- III. No. This change is consistent with the bases of the Technical Specifications on APRM setpoints, which defines the method of circuit adjustment.

SER NO. 82-211

Cross Reference: PORC Mtg. No. 82-238 11/30/82

Description of Change:

Evaluation of operation up to 50% power with one leaking train of the nitrogen storage portion of the Containment Instrument Gas system.

Summary:

- I. No. Short term ADS requirements are unaffected as long as accumulator pressure is maintained at or above 150 psig. Long term requirements are met based on a calculation showing that 2 ADS valves are sufficient to remove decay heat 1 day after shutdown from 50% rated thermal power, assuming that 50% rated thermal power has never been exceeded.
- II. No. See I above.
- III. No. See I above. The short and long term requirements being met satisfies the bases for margin of safety in the Technical Specifications.

SER NO. 82-212

Cross Reference: FMR 82-081

Description of Change:

Phase A modifications to S&A building.

Summary:

- I. No. The subject modifications cover various facility additions generally within the existing S&A building, which is not safety-related. Construction-related concerns due to underground piping and ductwork have been reviewed and found acceptable.
- II. No. See I above.
- III. No. See I above.



SER NO. 82-213

Cross Reference: PMR 82-800

Description of Change:

Addition of orifices in each of the six combined intercept valve fast acting solenoid valves.

Summary:

- I. No. The fast acting solenoid is a non-safety valve; however, it is integral to the turbine trip analysis in the FSAR. This modification has no effect on that analyses with respect to turbine trip, closure times or overspeed.
- II. No. Failure of an orifice will not cause overspeed or prevent turbine trip. See I above.
- III. No. Based on II above, no margin of safety is reduced by this modification.

SER NO. 82-214

Cross Reference: PMR 82-433

Description of Change:

Revised SGTS logic to delete automatic fan switch-over on a high-radiation signal.

Summary:

- I. No. The feature being deleted is not considered in any FSAR analysis, including offsite dose. Equipment reliability will be increased by preventing unnecessary automatic switch-overs.
- II. No. This modification allows the SGTS to conform to the original safety analysis by letting it function on a LOOP rather than tripping it because the SGTS radiation monitors fail high.
- III. No. The basis for the SGTS Technical Specifications is unaffected by this change.

SER NO. 82-215

Cross Reference: PMR 82-718

Description of Change:

Replacement of containment instrument gas pressure switches with static O-ring pressure switches.

Summary:

- I. No. The pressure switch is being replaced with a switch of the same rating and improved reliability.
- II. No. This is a one-for-one swap of pressure switches. No new situation is created and reliability is increased.
- III. No. The basis for the related ECCS system, ADS, is unaffected by this changeout for the reasons in I and II above.

SER NO. 82-216

Cross Reference: PMR 82-744

Description of Change:

Welding of stiffening plate to existing HPCI pipe support base plate.

Summary:

- I. No. The modification corrects a deficiency thereby allowing the support to meet original design requirements.
- II. No. The modification will create the design previously evaluated.
- III. No. Safety margin will be upgraded to the level previously evaluated.



SER NO. 82-217

Cross Reference: PMR 82-748

Description of Change:

Addition of welds and support material to RHR pipe support.

Summary:

- I. No. This modification will implement the intent of original design requirements.
- II. No. See I above.
- III. No. Performing this modification will maintain the previously evaluated safety margin.

SER NO. 82-218

Cross Reference: PMR 82-779

Description of Change:

Modification to ESW pipe support.

Summary:

- I. No. This modification will implement the intent of the original design requirements.
- II. No. See I above.
- III. No. Performing this modification will maintain the previously evaluated safety margin.

SER NO. 82-219

Cross Reference: PMR 82-780

Description of Change:

Modification to RWCU pipe support.

Summary:

- I. No. This modification will implement the intent of the original design requirements.
- II. No. See I above.
- III. No. Performing this modification will maintain the previously evaluated safety margin.

SER NO. 82-220

Cross Reference: Setpoint Change Request 82-109

Description of Change:

Revision of various 480 VAC MCC breaker settings.

Summary:

- I. No. These settings are not described in the FSAR. The new settings meet the standard design objectives, i.e. high enough to handle both inrush and full load currents without random tripping while low enough to detect short circuits.
- II. No. The new settings are in accordance with existing design philosophies and therefore create no new accident situations.
- III. No. By meeting the objectives in I above, safety margin is maintained.

SER NO. 82-221

Cross Reference: Setpoint Change Request 82-110

Description of Change:

Revision of various 480 VAC MCC breaker settings.

Summary:

- I. No. These settings are not described in the FSAR. The new settings meet the standard design objectives, i.e. high enough to handle both inrush and full load currents without random tripping yet low enough to detect short circuits.
- II. No. The new settings are consistent with existing design philosophies and therefore create no new accident situations.
- III. No. By meeting the objectives in I above, safety margin is maintained.

SER NO. 82-222

Cross Reference: Setpoint Change Request 82-111

Description of Change:

Revision of various 480 VAC MCC breaker settings.

Summary:

- I. No. These settings are not described in the FSAR. The new settings meet the standard design objectives, i.e. high enough to handle both inrush and full load currents without random tripping yet low enough to detect short circuits.
- II. No. The new settings are consistent with existing design philosophies and therefore create no new accident situations.
- III. No. By meeting the objectives in I above, safety margin is maintained.

SER NO. 82-223

Cross Reference: Setpoint Change Request 82-112

Description of Change:

Revision of various 480 VAC MCC breaker settings.

Summary:

- I. No. These settings are not described in the FSAR. The new settings meet the standard design objectives, i.e. high enough to handle both inrush and full load currents without random tripping yet low enough to detect short circuits.
- II. No. The new settings are in accordance with existing design philosophies and therefore create no new accident situations.
- III. No. By meeting the objectives in I above, safety margin is maintained.

SER NO. 82-224

Cross Reference: Setpoint Change Request 82-113

Description of Change:

Revision of various 480 VAC MCC breaker settings.

Summary:

- I. No. These settings are not described in the FSAR. The new settings meet the standard design objectives, i.e. high enough to handle both inrush and full load currents without random tripping yet low enough to detect short circuits.
- II. No. The new settings are consistent with existing design philosophies and therefore create no new accident situations.
- III. No. By meeting the objectives in I above, safety margin is maintained.

SER NO. 82-225

Cross Reference: Setpoint Change Request 82-114

Description of Change:

Revision of various 480 VAC MCC breaker settings.

Summary:

- I. No. These settings are not described in the FSAR. The new settings meet the standard design objectives, i.e. high enough to handle both inrush and full load currents without random tripping yet low enough to detect short circuits.
- II. No. The new settings are consistent with existing design philosophies and therefore create no new accident situations.
- III. No. By meeting the objectives in I above, safety margin is maintained.

SER NO. 82-226

Cross Reference: Setpoint Change Request 82-149

Description of Change:

Change temperature differential switch timer on SGTS heaters to allow more time to establish delta T due to colder outside air temperatures.

Summary:

- I. No. The time it takes to develop the required delta T across the heaters is not considered in FSAR analysis. The trip function is maintained.
- II. No. The time to meet the delta T interlock does not affect or interact with any other safety-related systems, and the single failure criteria is met via the redundant system. The ability of SGTS to perform all of its safety functions is unaffected.
- III. No. The Technical Specification requirements related to SGTS are not affected by this change.

SER NO. 82-227

Cross Reference: PMR 82-692

Description of Change:

Deletion of pressure switches and relays from vacuum breaker test logic in the primary containment vents - vacuum relief system.

Summary:

- I. No. The affected components were part of a seal-in circuit which was defeated by an earlier modification. The only function of the breakers which is altered is that the operator can no longer leave them unattended in the test position; a pushbutton must be continuously depressed.
- II. No. A review of FSAR Table 15.0-2, and analyses of primary/secondary containment, Control Room habitability, pipe breaks, and instrument time responses are unaffected.
- III. No. The function of the vacuum relief valves is unchanged by this modification, and their reliability is not reduced.

SER NO. 82-228

Cross Reference: PMR 82-387

Description of Change:

Addition of axial vibration monitoring equipment to the reactor recirculation motor/pump.

Summary:

- I. No. The design has taken into account the balance of the motor/pump assembly and potential missiles. Therefore, previous evaluations are unaffected.
- II. No. Split-ring failure is the only postulated accident; it would involve previous evaluations. However, it is not expected to occur, per a study conducted under the most adverse operating conditions.
- III. No. The Technical Specifications on the Reactor Recirculation System are unaffected by this modification.

SER NO. 82-229

Cross Reference: PMR 82-402

Description of Change:

Installation of two photoelectric smoke detectors in Fire Zone 1-6I.

Summary:

- I. No. This modification allows previous FSAR commitments and analyses to be met.
- II. No. After completion of this modification, the as-built configuration of this system will conform to previous analysis.
- III. No. This system was not included in the Technical Specifications.

SER NO. 82-230

Cross Reference: PMR 82-472

Description of Change:

Relay replacement to eliminate overreach due to transient responses of coupling capacitor voltage transformers.

Summary:

- I. No. Safety-related equipment is unaffected by this modification.
- II. No. Operation of the new relay will trip generator lockout and the turbine as previously evaluated in the FSAR.
- III. No. The Technical Specification bases do not address generator output as it is not required to safely shutdown the plant or control accident conditions within the plant.

SER NO. 82-231

Cross Reference: PMR 82-722

Description of Change:

Supply power from lighting panel breakers to suppression chamber receptacles.

Summary:

- I. No. This modification will bring the plant into accordance with design documents, allowing 120 VAC power for convenience in the suppression chamber during outages.
- II. No. A short circuit will trip a 20 amp lighting panel breaker which has no safety significance.
- III. No. This modification does not affect any system considered in the development of safety margin.

SER NO. 82-232

Cross Reference: PMR 82-746

Description of Change:

Replacement of struts on chilled water pipe support.

Summary:

- I. No. Larger supports will bring the as-built condition up to the design standards previously analyzed.
- II. No. See I above. The replacement struts were the ones intended by the original design.
- III. No. Margin of safety is maintained since no analysis is to be changed.

SER NO. 82-233

Cross Reference: PMR 82-758

Description of Change:

Replacement of butterfly valves in the circulating water system.

Summary:

- I. No. This modification is a one-for-one valve changeout with valves of a more reliable design. Circulating water is not a safety system.
- II. No. System function is unchanged, yet more reliable due to this modification.
- III. No. The improvement in system reliability cannot cause a reduction in safety margin.

SER NO. 82-234

Cross Reference: PMR 82-766

Description of Change:

Provide single failure protection to the reactor recirculation MG set trip circuit.

Summary:

- I. No. The function of the system remains unchanged. This change corrects a deficiency that would allow redundant devices to be negated by an electrical failure of a lockout relay contact.
- II. No. This change provides a redundant path for lockout relay energization. No new failure modes are created.
- III. No. The protective circuitry function addressed by the Technical Specifications is unaltered by this modification.

SER NO. 82-235

Cross Reference: PMR 82-773

Description of Change:

Replacement of butterfly valves in the Make-up Demineralized Water Transfer/Storage System.

Summary:

- I. No. This modification is a one-for-one changeout with valves of a more reliable design. Makeup demineralized water transfer is not a safety system.
- II. No. System function is unchanged, yet more reliable due to this modification.
- III. No. The improvement in system reliability cannot cause a reduction in safety margin.

SER NO. 82-236

Cross Reference: PMR 82-775

Description of Change:

Replacement of butterfly valves in the makeup demineralized water transfer/storage system.

Summary:

- I. No. This modification is a one-for-one changeout with valves of a more reliable design. Makeup demineralized water transfer is not a safety system.
- II. No. System function is unchanged, yet more reliable due to this modification.
- III. No. The improvement in system reliability cannot cause a reduction in safety margin.

SER NO. 82-237

Cross Reference: PMR 82-778

Description of Change:

Replacement of butterfly valves in the circulating water system.

Summary:

- I. No. This modification is a one-for-one changeout with valves of a more reliable design. Circulating water is not a safety system.
- II. No. System function is unchanged, yet more reliable due to this modification.
- III. No. The improvement in system reliability cannot cause of reduction in safety margin.

SER NO. 82-238

Cross Reference: PMR 82-811

Description of Change:

Relocation of leads from the reactor recirculation MG control power failure relay to allow alarm initiation upon fuse failure.

Summary:

- I. No. This modification allows detection of a credible failure mode (i.e. control fuse failure).
- II. No. This modification allows detection of a previously analyzed system operation.
- III. No. The Technical Specifications do not specifically address the components affected by this change.

SER NO. 82-239

Cross Reference: PMR 82-816

Description of Change:

Replacement of butterfly valves in the condensate system.

Summary:

- I. No. This modification is a one-for-one changeout with valves of a more reliable design. Condensate is not a safety system.
- II. No. System function is unchanged, yet more reliable due to this modification.
- III. No. The improvement in system reliability cannot cause a reduction in safety margin.

SER NO. 82-240

Cross Reference: PMR 82-817

Description of Change:

Replacement of butterfly valves in the Feed Pump Turbine Steam System.

Summary:

- I. No. This modification is a one-for-one changeout with valves of a more reliable design. Feed Pump Turbine Steam is not a safety system.
- II. No. System function is unchanged, yet more reliable due to this modification.
- III. No. The improvement in system reliability cannot cause a reduction in safety margin.

SER NO. 82-241

Cross Reference: PMR 82-818

Description of Change:

Replacement of butterfly valves in the Make-up Water Supply System.

Summary:

- I. No. This modification is a one-for-one changeout with valves of a more reliable design. Make-up water supply is not a safety system.
- II. No. System function is unchanged, yet more reliable due to this modification.
- III. No. The improvement in system reliability cannot cause a reduction in safety margin.

SER NO. 82-242

Cross Reference: PMR 82-819

Description of Change:

Replacement of butterfly valves in the miscellaneous drainage system.

Summary:

- I. No. This modification is a one-for-one changeout with valves of a more reliable design. Miscellaneous Drainage is not a safety system.
- II. No. System function is unchanged, yet more reliable due to this modification.
- III. No. The improvement in system reliability cannot cause a reduction in safety margin.



SER NO. 82-243

Cross Reference: PMR 82-823

Description of Change:

Replacement of butterfly valves in the Turbine Building Chilled Water System.

Summary:

- I. No. This modification is a one-for-one changeout with valves of a more reliable design. Turbine Building Chilled water is not a safety system.
- II. No. System function is unchanged, yet more reliable due to this modification.
- III. No. The improvement in system reliability cannot cause a reduction in safety margin.

SER NO. 82-244

Cross Reference: Setpoint Change Request 82-157

Description of Change:

Change level switch setting on regeneration waste surge tanks.

Summary:

- I. No. The waste sludge collection, transfer, and processing system is not safety-related. This change increases the usable volume in the surge tank by allowing the discharge pumps to start sooner.
- II. No. See I above.
- III. No. The Technical Specifications address effluent releases to unrestricted areas. This does not apply to this modification.

SER NO. 82-245

Cross Reference: PMR 82-788

Description of Change:

Allow RHR valve operation from the remote shutdown panel without manual actions.

Summary:

- I. No. The design basis of the remote shutdown panel (RSP) requires no event other than control room evacuation. This modification has no impact on safety operation under that criteria. (Several NSSSS isolation signals will no longer interlock the valves when their control is transferred to the RSP.)
- II. No. This modification allows more control from the RSP without creating the possibility of an unanalyzed event.
- III. No. This action does not reduce safety margin as defined in the basis for any Technical Specification.

SER NO. 82-246

Cross Reference: PMR 82-081

Description of Change:

Setting of mechanical equipment on the S&A building roof.

Summary:

- I. No. This activity, which affects a non safety-related structure, has been reviewed and found not to impact the safety of buried piping nor duct banks.
- II. No. See I above.
- III. No. See I above.

SER NO. 82-247

Cross Reference: PMR 82-763

Description of Change:

Removal of unit isolation mechanism on clarified water system.

Summary:

- I. No. The de-isolation of the system will allow seal water to flow to the circulating and service water pumps in Unit 2. This will not affect any previous evaluation in the FSAR.
- II. No. See I above.
- III. No. No systems that form any basis for a Technical Specification are affected by this modification.

SER NO. 82-248

Cross Reference: PMR 82-835

Description of Change:

Restoration of SPING sample pump motor.

Summary:

- I. No. This modification restores the original design of the sample system without affecting the Reactor Building SPING operation.
- II. No. The subject SPING is not safety-related, and its operation remains unchanged.
- III. No. The monitoring system will be fully capable of performing its intended function.

SER NO. 82-249

Cross Reference: FMR 82-277B

Description of Change:

Relocation of Yard Lighting and Cathodic Protection Equipment to support S&A building modifications (Phase B).

Summary:

- I. No. The subject modification does not affect safety-related systems other than concerns related to excavation for foundations in areas of buried Class 1E piping and duct banks. Standard construction precautions will be followed.
- II. No. See I above.
- III. No. The subject systems are not addressed in the Technical Specifications.

SER NO. 82-250

Cross Reference: PMR 82-081

Description of Change:

Addition of drains to LRW system to support decontamination shop equipment in the S&A building Phase A modification.

Summary:

- I. No. The additional drains do not interface with any safety-related equipment.
- II. No. This modification will not allow inadvertant transfer of contaminated fluid to a clean drainage system.
- III. No. These drains have no affect on the basis for the LRW system, as specified in the Technical Specifications.



SER NO. 82-251

Cross Reference: PMR 82-815

Description of Change:

Move fire hose reel 1 HR-222 to a more visible location.

Summary:

- I. No. The relocation of the hose reel does not jeopardize any safety-related equipment.
- II. No. See I above.
- III. No. This hose reel is not listed in the Technical Specifications.

SER NO. 82-252

Cross Reference: PMR 82-729

Description of Change:

Application of epoxy surfaces to the walls of the LRW filter valve gallery to make decontamination easier.

Summary:

- I. No. The application of epoxy has no adverse affect on equipment. In the event of a leak, the epoxy will make decontamination easier.
- II. No. See I above.
- III. No. See I above.

SER NO. 82-253

Cross Reference: PMR 82-624

Description of Change:

Provide a flush for the LRW evaporator level sensing lines to prevent plugging.

Summary:

- I. No. Any failure related to this modification is bounded by the previous analyses in the FSAR. Materials used in this modification shall be consistent with existing standards.
- II. No. All input parameters and initial conditions in existing FSAR analyses remain unchanged.
- III. No. No adverse effects on any safety-related systems will occur due to this modification; the margin of safety therefore remains unchanged.

SER NO. 82-254

Cross Reference: PMR 80-007

Description of Change:

Replacement of EHC Mechanical Trip Valve (MTV) with a higher quality valve, thereby increasing turbine generator reliability.

Summary:

- I. No. There is no difference with respect to FSAR evaluations due to this modification. However, the probability of sticking of the MTV spool piece will be greatly reduced due to its stainless steel parts not being as susceptible to corrosion as the previous carbon steel spool piece.
- II. No. The new MTV will functionally behave exactly as the former MTV.
- III. No. Since the MTV will functionally behave as its predecessor, no margin of safety is reduced.

SER NO. 82-255

Cross Reference: PMR 82-862

Description of Change:

Installation of 30 amp breaker and wiring to support a new receptacle in the Service and Administration Building.

Summary:

- I. No. This modification has no affect on safety-related equipment.
- II. No. See I above.
- III. No. See I above.

SER NO. 82-256

Cross Reference: PMR 82-687

Description of Change:

Replacement of relays in RHR, RCIC, RWCU and mainsteam (MS) with AGASTAT time delay relays so that systems do not isolate in the event of a loss of 120 VAC instrument bus.

Summary:

- I. No. The time delay ($1.0 \pm 10\%$ seconds) does not affect the results of the MS line break outside containment analysis. Redundant high flow isolation trips will isolate breaks in the affected piping systems.
- II. No. Previous FSAR analyses relied only upon the high flow isolation trips; these trips are unaffected by this modification.
- III. No. This action will not affect valve closure times; time response of area high temperature instruments are not considered in the margin of safety as defined by the Technical Specifications.

SER NO. 82-257

Cross Reference: Startup Subtest ST 14.5

Description of Change:

Exception due to RCIC 150 psig test not being completed during Test Condition 2.

Summary:

- I. No. RCIC is not safety-related; all other RCIC startup testing has been completed.
- II. No. See I above.
- III. No. The RCIC system is not included in the basis for any Technical Specification safety limit.

SER NO. 82-258

Cross Reference: Startup Test ST 13

Description of Change:

Startup Test 13, "Process Computer" will not be completed during Test Condition 2, but during Test Condition 3 instead.

Summary:

- I. No. The backup to the process computer for thermal limits calculations, BUCLE, is available.
- II. No. See I above.
- III. No. BUCLE is available to perform as computer backup for thermal limits calculations.

SER NO. 82-259

Cross Reference: Startup Test ST 5.7

Description of Change:

Startup Test 5.7, "Scram Timing of Selected Rods During Planned Scrams of Startup Test Program" will not be performed in conjunction with Startup Test 31.1, "Loss of Turbine Generator and Offsite Power" due to loss of power to the Rod Position Indication System.

Summary:

- I. No. Although Startup Test 5.7 is not performed during Test Condition 2, individual scram time tests are performed during the test condition. Thus the function served by Startup Test 5.7 is met (via Engineering Surveillance SE-55-001).
- II. No. See I above.
- III. No. All requirements set forth by the Technical Specifications were met by the implementation of SE-55-001 during Test Condition 2.

SER NO. 82-260

Cross Reference: Setpoint Change Request 82-347

Description of Change:

Revised circuit breaker settings in the 480V AC motor control centers.

Summary:

- I. No. The revised settings are not described in the FSAR; each revised setting is high enough to permit completion of the flow path for both inrush and full load currents without random tripping. They are also low enough to enable sensitive short circuit detection.
- II. No. The subject settings are consistent with existing design philosophies and documentation.
- III. No. The basis for the margin of safety is covered by the design criteria expressed in I above.

SER NO. 82-261

Cross Reference: Setpoint Change Request 82-348

Description of Change:

Revised circuit breaker settings in the 480 V AC motor control centers.

Summary:

- I. No. The revised settings are not described in the FSAR; each revised setting is high enough to permit completion of the flow path for both inrush and full load currents without random trippings. They are also low enough to enable sensitive short circuit detection.
- II. No. The subject settings are consistent with existing design philosophies and documentation.
- III. No. The basis for the margin of safety is covered by the design criteria expressed in I above.

SER NO. 82-262

Cross Reference: PMR 82-887

Description of Change:

Removal of boundary tag from valve in condensate and refueling water system on the Unit 1 side of the security boundary to allow flushing of Unit 2 piping.

Summary:

- I. No. This modification does not affect equipment necessary for safe shutdown of the plant. Due to the existence of two other boundary valves, no pipe break can deplete either the refueling water storage tank, condensate storage tank, or demineralized water storage tank.
- II. No. This modification simply allows demineralized water to flow through Unit 1 piping from Unit 2 piping, without jeopardizing the boundary - see I above.
- III. No. No equipment and/or systems which are part of any basis or criteria in any Technical Specification are affected by this change.

