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July 28, 1988

U. S. Nuclear Regulatory Commission  
Mail Station P1-137  
Washington, D. C. 20555

Attention: Document Control Desk

Gentlemen:

SUBJECT: Grand Gulf Nuclear Station  
Unit 1  
Docket No. 50-416  
License No. NPF-29  
Report of 10 CFR 50.59 Safety  
Evaluations - August 1, 1987  
through December 31, 1987  
AECM-88/0117

In accordance with the requirements of 10 CFR 50.59(b), attached is System Energy Resources, Inc.'s (SERI) report of changes, tests, and experiments determined to be reportable under the requirements of 10 CFR 50.59 for the period of August 1, 1987 through December 31, 1987. This report also contains those safety evaluations identified in Attachment II to SERI letter AECM-87/0196 (dated November 27, 1987), which supports Revision 2 to the Grand Gulf Nuclear Station UFSAR and that have not been previously reported to the NRC.

Yours truly,

ODK:bms  
Attachment

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\*\*This document is from an earlier reporting period in 1987.

SRASN: NPE-87-117

DOC NO: DCIP-86-0081

SYSTEM: P81

DESCRIPTION OF CHANGE: This change reduces the switch setpoints and differentials on pressure switches P81N134A, B and P81N135A, B of the Division III D/G starting air compressors. The old setpoints are:

P81N134A, B 210 psig with a 40 psi differential  
 P81N135A, B 200 psig with a 50 psi differential

The new setpoints are:

P81N134A, B 200 psig with a 35 psi differential  
 P81N135A, B 190 psig with a 35 psi differential

REASON FOR CHANGE: The old switch differential setting allowed the air compressor to operate up to 250 psig which is the relief valve set pressure on the air storage tank. Lifting of the valve allowed the tank pressure to reduce below the switch setpoint and the compressor is started. The previous condition caused excessive cycling of the electric motor driven air compressor.

SAFETY EVALUATION: This change modifies the operation of the Division III D/G starting air compressors only by decreasing the operating pressure ranges to: 200 psig start and 235 psig minimum shutoff for the motor driven compressor; 190 psig start and 225 psig minimum shutoff for the diesel driven compressor. This equipment is described in UFSAR Paragraphs 9.5.6.2.2, 9.5.6.3 and Table 9.5. This change does affect the operating pressure described in the UFSAR. However, since the switch has a 3 psi repeatability, the minimum required starting air pressure of 175 psig is not reduced, the low pressure alarm setpoint of 190 psig is not changed, and the UFSAR Safety Evaluation requirement for the system to provide five consecutive D/G starts without compressor operation is not affected. Therefore, the availability of the Division III D/G is not reduced and the probability of occurrence of an accident previously evaluated in the FSAR is not increased.

Since the capability of the Air Start System to perform five no-load starts of the Division III D/G as stated in the FSAR is not changed, there is no increase in the probability of a malfunction of equipment important to safety or in the consequences of an accident or malfunction of equipment important to safety.

Since the new setpoints do not decrease the operating pressure below the minimum valve required by Technical Specification 4.8.1.1.2, there is no possibility of an accident different from any previously evaluated in the FSAR. Since the function of the pressure switches remains the same, and since the revised

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SAFETY EVALUATION (Cont'd)

setpoints include uncertainty for a 3 psi repeatability/accuracy and maintain the starting air pressures above the minimum valves previously described, there is no possibility of a malfunction of equipment different from previously evaluated in the FSAR.

Since the minimum starting air supply pressure is maintained above the minimum valve required by Technical Specification 4.8.1.1.2, there is no reduction in the margin of safety as defined in the basis for any Technical Specification.

SRASN: NPE-87-146

DOC NO: DCP-86-0100R0

SYSTEM: P52

DESCRIPTION OF CHANGE: This change installs a manual isolation valve upstream of check valves in the service air line to the RWCU phase separator.

REASON FOR CHANGE: To prevent spread of contamination back into the Service Air System.

SAFETY EVALUATION: This change does not alter the operation of the Service Air System. The Service Air System is not safety related and its failure has no effect on any safety-related system and will not prevent safe reactor shutdown. The isolation valve meets all applicable design requirements. Therefore, there is no increase in the probability or consequences of an accident or of a malfunction of equipment important to safety as previously evaluated in the FSAR. Since no new failure mode is created and no operational or functional change is created by this change there is no probability of an accident or malfunction of equipment important to safety different from any previously evaluated in the FSAR. Since the portion of the Service Air System affected by this change is not safety related and is not addressed in Technical Specifications, there is no reduction in the margin of safety.

SRASN: NPE-87-208

DOC NO: DCP-82-0631

SYSTEM: P21

DESCRIPTION OF CHANGE: This change provides for the utilization of the makeup water treatment system (P21) instead of the condensate cleanup system (N22) as the water source for the generator primary water system.

REASON FOR CHANGE: Nuclear by-products in the condensate cleanup system contaminate radiation comparisons for the tritium detection instruments in the primary water.

SAFETY EVALUATION: Piping and pipe supports added or modified by this DCP meet all applicable design requirements and will function in their intended manner. Therefore, there is no increase in the probability or consequences of an accident or malfunction of equipment important to safety. Similarly there is no possibility of an accident or malfunction of equipment different from any previously evaluated in the FSAR. Because the change meets all ANSI B31.1 code requirements, the margin of safety is not reduced.

SRASN: NPE-87-246

DOC NO: DCP-86-0097

SYSTEM: P11

DESCRIPTION OF CHANGE: This DCP provides instructions for the permanent installation of lead shielding on the 10"-HBD-1166 and 2"-HBD-380 lines on elevation 119' of the Auxiliary Building.

REASON FOR CHANGE: To provide radiation shielding for maintaining ALARA.

SAFETY EVALUATION: The operation and function of the P11 and P60 systems will not change. The pipe support modifications supplied by this DCP meet all applicable design requirements. The Condensate/Refueling water and Suppression Pool Cleanup systems will function in their intended manner. Therefore, there is no increase in the probability or consequences of an accident previously evaluated in the FCAR. The modification of the supports and the installation of the lead shielding will not affect the function of the affected systems. The piping and pipe supports affected by this DCP meet all applicable design requirements and therefore, there is no increase in the probability or consequences of a malfunction of equipment important to safety previously evaluated in the FSAR. Nor is there a possibility of an accident or malfunction of equipment different from any previously evaluated. Since the affected portion of the P11 system is not addressed in Technical Specifications, there is no reduction in any margin of safety.

SRASN: NPE-87-248

DOC NO: DCP-84-0016

SYSTEM: E12

DESCRIPTION OF CHANGE: This change adds 3-second time delay relays to the ECCS trip units.

REASON FOR CHANGE: To allow time for ECCS level transmitters to stabilize before sending output to ECCS trip units, preventing unwanted ECCS actuations upon restoration of 24 VDC power

SAFETY EVALUATION: This change allows the ECCS level transmitters to regain loop power and provide actual level indication to trip units. Therefore, there is no increase in the probability of occurrence of an accident previously evaluated in the FSAR. Use of Class 1E seismically qualified relays with Reg. Guide 1.75 separation and isolation of non 1E circuits ensures that previously evaluated safety systems will not be adversely affected by this change. Therefore, there is no increase in the consequences of an accident, nor is there an increase in the probability or consequences of a malfunction of equipment important to safety. Because of the inherent diversity and redundancy employed by this design change, additional failure modes introduced by it do not create a possibility of an accident of a different type from any previously evaluated in the FSAR. Since equipment malfunctions remain bounded by previous analyses, there is not a possibility of a malfunction of equipment important to safety different from any previously evaluated in the FSAR. The time delay is effective only on loss of power to the instrument loops and does not affect the response time or operation of ECCS injections. Therefore, there is no reduction in the margin of safety as defined in the basis for any technical specification.

SRASN: NPE-87-253

DOC NO: NPEFSAR-87-0051

SYSTEM:

DESCRIPTION OF CHANGE: This FSAR change request distinguishes between the nominal and minimum design flow rates for the SSW loops. These changes for clarification are made in Tables 9.2-3, 9.2-16, 9.2-17, 9.4-1 and 9.4-7.

REASON FOR CHANGE: During the flow balancing of the SSW A and B loops, several components had flow rates below their nominal design values. However, it was determined that the flows met or exceeded the minimum acceptable flow rates needed to achieve the design intent of the room coolers. This change in the UFSAR clarifies which flows are minimum and which are nominal.

SAFETY EVALUATION: There is no increase in the probability of occurrence or in the consequences of an accident or malfunction of equipment important to safety previously evaluated in the Safety Analysis Report. The minimum design flow rates were determined based on maintaining the respective rooms within their technical specification temperature limits and thereby maintain conditions within the equipment environmental qualification requirements. Therefore, there is no creation of possibility for an accident or malfunction of a different type than any evaluated previously in the Safety Analysis Report. Also, the margin of safety as defined for any technical specification remains unchanged.

SRASN: NPE-87-254

DOC NO: FSAR-CR-87-0021

SYSTEM:

DESCRIPTION OF CHANGE: The change revised the following drawings:

M-0035A, R19 initiated by MNCR-0462-85  
 M-0035K, R3 initiated by MNCR-0416-85  
 M-0036C, R7 initiated by MNCR-0587-86  
 M-0047A, R14 & 15 initiated by DCNs 9, 11 and 12  
 M-1051C, R10 initiated by MNCR-0495-86  
 M-1092A, R17 initiated by DCR 82-491  
 M-1102A, R13 initiated by MNCR-0443-85  
 M-1067G, R5 initiated by MNCR-0410-86  
 M-1094B, R16 initiated by QDR 059-87  
 M-0052A, R5 initiated by QDR 011-87

These drawing revisions were identified during various reviews of the referenced drawings and resulted in changes to the UFSAR.

REASON FOR CHANGE: The drawings were revised to reflect the as-built plant.

SAFETY EVALUATION: There is no increase in the probability of occurrence or in the consequences of an accident or malfunction of equipment important to safety previously evaluated in the Safety Analysis Report. These UFSAR changes incorporate later revisions of various Unit 1 drawings. These revisions were made to correct various discrepancies in the drawings. The revisions made consist of: (1) correction of as-built information previously incorporated incorrectly (M-0035A and M-1051C), (2) deletion of equipment that was never installed to reflect the as-built condition (M-0035K, M-1067G and M-1094B), (3) incorporation of as-built information (M-0047A, Revisions 14 and 15, M-1102A and M-0052A), (4) correction of a drafting error (M-0036C), (5) upgrade of the level of detail provided (M-1092A) and (6) incorporation of a design change (M-0047A, Revisions 14 and 15).

These drawing changes are not the result of any changes in the accident analyses. They do not reflect any (1) changes to material or construction standards for any system, (2) bypass of system design features, (3) changes to power supplies, (4) modifications to instrument accuracies, (5) decrease in auxiliary system capabilities, (6) system operational changes, or (7) decreases in system integrity.

There is no affect on the functioning of systems or components used in mitigating any accidents, nor are there any changes to the "Sequence of Events" description.

These drawing changes are not the result of any changes in the original material or construction practices used to support, separate or environmentally qualify equipment, nor are they due to the imposition of new loads, the changing of component protection features or the degradation of support system performance.

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## SAFETY EVALUATION (Cont'd)

These drawing changes do not affect the discussion of the consequences of any malfunction of equipment in the UFSAR. The changes are not the result of changes in equipment operation or design. There is no creation of a possibility for an accident or malfunction of a different type than any evaluated previously in the Safety Analysis Report.

These drawing changes are not the result of changes to assumed system or component failure modes, nor are they associated with any component or system whose failure would be outside the category of accidents in UFSAR Chapter 15.

These drawing changes do not modify or add to the UFSAR discussion of malfunctions of equipment. The drawing changes do not reflect equipment changes which could induce a transient which would lead to a malfunction of equipment or cause an equipment failure outside the categories described in the UFSAR. The basis for Technical Specification 3/4.6.6 indicates that the operability of the SGTS assures that sufficient iodine removal capability will be available to mitigate the effects of a LOCA. Since the performance of the SGTS has been verified by the periodic system functional test, the margin of safety defined in the basis for this Technical Specification has not been reduced.

The basis for Technical Specification 3/4.7.6 indicates that the operability of the fire suppression systems ensures that adequate fire suppression capability is available. The drawing changes do not affect the availability or adequacy of the fire suppression systems for Unit 1 and, therefore, do not reduce the margin of safety defined in the basis of this Technical Specification.

Technical Specification 3/4.11.2 indicates that the operability of the ventilation exhaust treatment system ensures that gaseous effluents will be treated prior to release to the environment. The drawing changes described on M-0047A do not affect the operability of the ventilation system and, therefore, do not reduce the margin of safety defined in this Technical Specification.

SRASN: NPE-87-256

DOC NO: DCP-87-0017-R00

SYSTEM: E12

DESCRIPTION OF CHANGE: This change adds new interlocks between suppression pool RHR suction valves Q1E12F004A-A and Q1E12F004B-B, and RHR shutdown cooling valves Q1E12F006A-A and Q1E12F006B-B, respectively. This will prevent valve Q1E12F004A-A or Q1E12F004B-B from opening when respective valves Q1E12F006A-A and Q1E12F008-A, or Q1E12F006B-B and Q1E12F009-B are open. This provides additional assurance that a flow path for draining reactor water inventory due to valve misalignment is not created.

Also, a new interlock prevents valve Q1E12F024A-A or Q1E12F024B-B from being opened when the respective valve Q1E12F004A-A or Q1E12F004B-B is closed. Valve Q1E12F024A-A or Q1E12F024B-B will automatically close when the respective valve Q1E12F004A-A or Q1E12F004B-B is closed. This ensures that a discharge path to the suppression pool is not created while in RHR shutdown mode.

REASON FOR CHANGE: Additional interlocks will enhance system reliability and reduce the potential for valve misalignment.

SAFETY EVALUATION: These changes provide additional assurance that a pathway from the reactor to the suppression pool is not inadvertently created. Only one RHR suction path is open at a time, and the changes prevent inadvertent discharge of reactor water inventory to the suppression pool via the test return line. No design features are bypassed, and no system operational changes are created. Therefore, there is no increase in the probability of any accident previously evaluated in the FSAR.

There is no impact on the description of systems or components used in mitigating any accident, nor are there changes to the "Sequence of Events" description in the FSAR. Therefore, there is no increase in the consequences of an accident previously evaluated in the FSAR.

The RHR system changes do not result in any changes in the original material or construction practices used to support, separate or environmentally qualify equipment, nor are they due to the imposition of new loads, the changing of component protection features or the degradation of support system performance. These changes do not, therefore, increase the probability of a malfunction of equipment previously evaluated in the UFSAR.

The RHR system changes do not affect the discussion of the consequences of any malfunction of equipment in the UFSAR. They do not prevent the RHR equipment from operating as designed and they do not cause RHR operation outside of design specifications. These changes do not, therefore, increase the consequences of a malfunction of equipment previously evaluated in the UFSAR.

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## SAFETY EVALUATION: (Cont'd)

The new interlocks assure that the RHR system will not be operated in a manner different from that described in the UFSAR. Therefore, there is no possibility of an accident of a different type from any previously evaluated in the UFSAR, nor the possibility of a malfunction of equipment important to safety.

This change does not affect instrumentation or equipment required to mitigate accidents. Remote shutdown capability and the LPCI mode of the RHR system are unaffected. The surveillance requirements for all Technical Specifications are unaffected by this change. Shutdown cooling capability, suppression pool cooling capability, and the isolation capability and thermal overload protection of containment isolation valves are all unaffected by this change. And the capability of either RHR train to provide 100% flow, or the availability of either train while in Mode 5 is unaffected. Therefore, there is no reduction in the margin of safety as defined in the basis of any for any Technical Specification.

SRASN: NPE-87-257

DOC NO: CN-87-0081

SYSTEM: P52

DESCRIPTION OF CHANGE: This Change Notice provided for service air line 1" JBD-837 to the RWCU phase separator to be cut and capped.

REASON FOR CHANGE: This change was made to prevent the possibility of contaminating the Service Air System (P52).

SAFETY EVALUATION: There is no increase in the probability of occurrence or in the consequences of an accident or malfunction of equipment important to safety previously evaluated in the Safety Analysis Report. The affected portion of the (P52) system has no safety related function as discussed in UFSAR Section 3.2. As per UFSAR Section 9.3.1 failure of the system will not compromise any safety-related system or component and will not prevent safe reactor shutdown. Cutting and capping the service air line will prevent the contamination of service air system. This modification will not affect the function of the RWCU phase separator.

There is no creation of a possibility for an accident or malfunction of a different type than any evaluated previously in the Safety Analysis Report.

This change does not provide an operational or functional change to the Service Air (P52) System. The use of service air for backflushing the RWCU phase separator decant lines has been determined as not being required.

The affected portion of P52 system has no safety function and is not addressed in the Tech. Spec. and was therefore not utilized in computing the margin of safety.

SRASN: NPE-87-259

DOC NO: DCP-82-0252

SYSTEM: P81

DESCRIPTION OF CHANGE: This change permanently installs a prelubrication system which will provide a manual prelubrication method when the HPCS diesel engine is inoperative.

REASON FOR CHANGE: To alleviate the need for an external oil source to perform the manual prelubrication.

SAFETY EVALUATION: The operation and function of the HPCS diesel generator do not change as a result of this DCP. The DCP is a maintenance enhancement to prelubricate an inoperative engine. The valves installed by this change are normally closed, including during times when the engine is operating. Since the installed tubing meets all design requirements and since the HPCS diesel generator functions in its intended manner, there is no increase in the probability of accident or malfunction of equipment important to safety either analyzed or not analyzed in the FSAR. The HPCS diesel engines are designed such that loss of any single lube oil system component will not cause loss of lube oil supply to more than one engine. Since this modification maintains that design feature, the consequences of an accident previously evaluated in the FSAR is not increased. Since the modification serves only a maintenance function and is not required during diesel engine operation, the consequences of a malfunction of equipment is not increased. Since the operation and function of the HPCS diesel generator system is not changed, this DCP does not reduce the margin of safety as defined in the basis for any technical specification.

SRASN: NPE-87-260

DOC NO: FCR-86-0034

SYSTEM:

DESCRIPTION OF CHANGE: This software change to UFSAR is to exempt the moderate energy piping inside the Diesel Generator building from postulation of pipe cracks per the following NRC guidance:

Per Branch Technical Position MEB 3-1 (NUREG-75/087) and MEB 3-1 (NUREG-0800) and Specification 9645-M-195.0, through-wall leakage cracks should be postulated in moderate energy fluid system piping located adjacent to structures, systems or components important to safety, except where the maximum stress range in these portions of Class 2 or 3 (ASME Code, Section III) or non-safety class piping is less than  $0.4 (1.25 S_h + S_A)$ . Flooding, spraying, wetting and other hazards due to postulated pipe cracks in moderate energy piping have been evaluated in the UFSAR.

REASON FOR CHANGE: This change is to exempt the moderate energy piping inside the Diesel Generator building from postulated pipe cracks per the subject NRC guidance.

SAFETY EVALUATION: There is no increase in the probability of occurrence or in the consequences of an accident or malfunction of equipment important to safety previously evaluated in the Safety Analysis Report. The stress levels for all fluid containing piping in the Diesel Generator (D.G.) building were found to be below the limits in BTP MEB 3-1 for the postulation of moderate energy cracks. Therefore, cracks are not required to be postulated in these systems. Since the postulation of pipe cracks inside the D.G. building is not required, the probability of internal flooding in the D.G. building is reduced. Therefore this change will not increase the probability of occurrence of an accident previously evaluated in the UFSAR. Therefore, there is no creation of a possibility for an accident or malfunction of a different type than any evaluated previously in the Safety Analysis Report. Since safety-related equipment will not be affected by this change, the margin of safety as defined in the basis for any Technical Specification for this equipment is not reduced.

SRASN: NPE-87-261

DOC NO: FSAR-86-0069

SYSTEM:

DESCRIPTION OF CHANGE: GGNS UFSAR Section 3.5.1 describes requirements for postulating internally generated missiles. Specifically, subsections 3.5.1.1.2i and 3.5.1.2.2j require that all pressure vessels and pressurized bottles containing noncondensable gases (air, nitrogen, carbon dioxide, etc.) with an operating pressure of 100 psig or above be evaluated as potential missile sources. These conditions require missile evaluations for relatively low pressure components, specifically, the safety relief valve air accumulators and air receivers. In addition, it may be interpreted to include fire extinguishers.

The changes to the GGNS UFSAR subsections 3.5.1.1.2i, 3.5.1.2.2j, and table 3.5-5 will exempt all pressure vessels and pressurized bottles containing non-condensable gases with operating pressures at or below 275 psig from potential missile source evaluations.

This change also exempts all fire extinguishers from missile postulation criteria. This clarification is being made to ensure that Grand Gulf design criteria is consistent with current nuclear industry practices.

REASON FOR CHANGE: These changes are made to provide pressure limits for all pressure vessels and pressurized bottles containing non-condensable gases consistent with those for high energy pipe as specified in Standard Review Plan 3.6.1 and to ensure consistency with standard industry practices.

SAFETY EVALUATION: There is no increase in the probability of occurrence or in the consequences of an accident or malfunction of equipment important to safety previously evaluated in the Safety Analysis Report. The UFSAR changes exempt pressurized bottles and pressure vessels containing noncondensable gases with operating pressures at or below 275 psig from being postulated as missiles. These changes are made to provide pressure limits for all pressurized bottles and pressure vessels which are consistent with those for high energy pipe. An evaluation was performed which concluded that the current pressure cutoff point of 100 psig is overly conservative. This conclusion is based on the following information:

1. The air accumulators are equipped with pressure relief devices designed to prevent overpressure failures.
2. The MSIV/MSRV air accumulator/receiver handholes are exposed to pressure loads only and are not subjected to bending stresses such as those experienced in piping systems.
3. Nine dockets of other nuclear plants reviewed require missile evaluations only for pressurized components with operating pressures in excess of 275 psig.

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## SAFETY EVALUATIONS: (Cont'd)

4. The air accumulators/receivers are ASME Section III, Class 3, seismic Category I components required to undergo pressure tests in accordance with the applicable requirements of Article ND-6000 of the Code and are subject to extensive QA requirements.

In addition, all fire extinguishers will be exempt from being postulated as missiles based on the following:

1. Underwriter's Laboratories Standards require fire extinguishers to undergo drop tests, vibration tests, and pressure tests and thus, the extinguishers are not considered a missile hazard should they become dislodged during a seismic event.
2. Per Plant Staff procedures, fire extinguishers are periodically hydrostatically tested in compliance with NFPA 10.
3. Plant Staff procedures require a monthly visual and a periodic detailed inspection of all fire extinguishers.
4. Nine dockets of other nuclear plants reviewed indicated that fire extinguishers were not considered potential missiles.
5. Fire extinguishers are required to be equipped with pressure relief devices per UL Standards.

These changes result from an evaluation which included the review of standard industry practices, considerations of inherent design safety factors, review of nine dockets of other nuclear plants, and guidance provided in the Standard Review Plan. In addition, all fire extinguishers will be exempted based on a review of Underwriters Laboratories standards for safety of fire extinguishers and a review of the operating conditions of fire extinguishers. These reviews have concluded that the GGNS UFSAR is overly conservative in the criteria used for postulating missiles. The elimination of these missile sources will not affect the results of accident analyses in the UFSAR.

These changes are made to provide pressure limits for all pressure vessels and pressurized bottles containing non-condensable gases consistent with those for high energy pipe as specified in Standard Review Plan 3.6.1.

There is no creation of a possibility for an accident or malfunction of a different type than any evaluated previously in the Safety Analysis Report. The UFSAR changes do not result in any plant equipment modifications. The exemption of pressure

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## SAFETY EVALUATION: (Cont'd)

vessels and pressurized bottles containing noncondensable gases at or below 275 psig reduces the number of internally generated missiles to be postulated. In addition, all fire extinguishers are exempted. These changes result from an evaluation which included the review of standard industry practices, consideration of inherent design safety features, review on nine dockets of other nuclear plants, and guidance provided in the Standard Review Plan. This evaluation concluded that these potential missiles could be eliminated as credible missile sources at GGNS. The elimination of these sources of missiles does not create the possibility of an accident of a different type than already evaluated in the UFSAR. The UFSAR changes do not require any physical plant or equipment modifications.

There is no reduction in the margin of safety as defined in the basis for any Technical Specification. The UFSAR changes exempt all pressure vessels and pressurized bottles containing noncondensable gases with operating pressures at or below 275 psig from being postulated as missiles. In addition, all fire extinguishers are exempted from being postulated as missiles. These changes do not reduce the margin of safety as defined in the basis for any Technical Specification, because internally generated missiles are not used in the Technical Specifications as a basis to define the margin of safety.

SRASN: NPE-87-262

DOC NO: MNCR-83-740

SYSTEM:

DESCRIPTION OF CHANGE: This MNCR was written to document that during the performance of surveillance procedures that the peak recording accelerographs (PRA), 1C85-XR-R011, R012, R013, and R014, were found to have been rendered in-serviceable. These PRA's are located in the drywell on the "A" Main Steam line, "B" Recirc Loop, LPCS line and the HPCS line.

In AECM 86/0006, MP&L submitted to the NRC, for their review and concurrence, a technical justification for the deletion of these PRA's on the reactor piping. This justification stated that the PRA's are not suitable for the installation on a piping system which is subjected to frequent transients other than seismic transients. And therefore, the PRA's do not serve any meaningful purpose for post-seismic damage evaluation. Additionally, it was stated that there are sufficient seismic instruments which will provide the required information for post-seismic damage evaluation.

In MAEC 86/0169, the NRC Staff concluded that the four PRA's mounted on the reactor piping do not serve any meaningful purpose for post-seismic damage evaluation and can be deleted. Also the Staff concluded that with the installation of a triaxial strong motion accelerometer per DCP 81/5018, along with other existing seismic instrumentation, will provide the required information for post-seismic damage evaluation.

Per this submittal to this MNCR, the disposition is being revised to state that the PRA's are to remain installed and that no operability or functional requirements for the PRA's are required. The abandoning of the PRA's will not produce any new safety concerns, since it has been determined that no meaningful data can be obtained from the PRA's and no change is being made to its installation configuration.

REASON FOR CHANGE: This submittal documents that the four subject PRA's serve no meaningful purpose and will no longer be utilized for seismic analysis.

SAFETY EVALUATION: There is no increase in the probability of occurrence or in the consequences of an accident or malfunction of equipment important to safety previously evaluated in the Safety Analysis Report. The subject PRA's are a non-safety related passive device used to provide information for post-seismic damage evaluation. The deletion of their functional and operational requirements will not impact the operation of the plant, since the information provided by the PRA's has been determined to be meaningless and that the information can also be derived from existing seismic instrumentation. Also, the

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SAFETY EVALUATION: (Cont'd)

abandoning of the PRA's in place will not impact plant operation since no change to their installation configuration is being made. Therefore, there is no creation of a possibility for an accident or malfunction of a different type than any evaluated previously in the Safety Analysis Report. Also, there is no reduction in the margin of safety as defined in the basis for any Technical Specification.

SRASN: NPE-87-263

DOC NO: FCR-87-0026

SYSTEM:

DESCRIPTION OF CHANGE: Question & Response (Q&R) 040.32 is incorporated into Section 3.11 of the UFSAR. This question deals with submergence of equipment during a LOCA. The response to Q&R 040.32 was modified and incorporated into 3.11 as outlined in Change Request #NPEFSAR 87/0026. This change request identifies the buildings, elevations, and durations of flooding (submergence) and makes statements to address qualification of affected equipment per 10CFR50.49 requirements. Submergence was identified at the onset of the GGNS Environmental Qualification Program. Where applicable, equipment testing was performed or justification for not testing was provided. This UFSAR change therefore has no impact on the GGNS Environmental Qualification.

REASON FOR CHANGE: This change updated the UFSAR with regard to qualification of affected equipment due to submergence as modified from Q&R 040.32.

SAFETY EVALUATION: There is no increase in the probability of occurrence or in the consequences of an accident or malfunction of equipment important to safety previously evaluated in the Safety Analysis Report.

The UFSAR Q&R deals with equipment submergence and the qualification thereof. Submergence has always been an environmental parameter considered in the qualification of equipment per NUREG 0588. It has been addressed where applicable. Environmental Qualification (EQ) of 50.49 equipment is not voided by this UFSAR change.

There is no creation of a possibility for an accident or malfunction of a different type than any evaluated previously in the Safety Analysis Report. This is a software change only, incorporation of Q&R 040.32 to include equipment submergence in Section 3.11.1 discussion of accident conditions is not resultant of any plant modifications. It was identified as part of the original plant design and has been adequately addressed for 10CFR50.49 equipment required for safe shutdown.

There is no reduction in the margin of safety as defined in the basis for any Technical Specification. The equipment submergence issue (Q&R 040.32) has been adequately addressed in the GGNS EQ program.

SRASN: NPE-87-264

DOC NO: FCR-87-0029

SYSTEM:

DESCRIPTION OF CHANGE: These changes relate to HCU floor loads due to a LOCA and the corresponding drag and impact loads on structures below the HCU floor and above the pool surface.

REASON FOR CHANGE: This change incorporated the UFSAR changes per commitments made in AECM-82/0030.

SAFETY EVALUATION: There is no increase in the probability of occurrence or in the consequences of an accident or malfunction of equipment important to safety previously evaluated in the Safety Analysis Report. These changes incorporate aspects of the original design basis and incorporate information used in the original accident consequence evaluation for the HCU floor and structures below this floor and above the pool surface. Therefore, postulated accident consequences are not changed. No different accidents can be postulated since the incorporated information is part of the original design basis. No new equipment malfunctions can be postulated to occur since the change incorporates information already utilized to establish acceptability of existing safety related equipment. The original design basis considered the information being incorporated. Therefore, the margin of Tech. Specs. is not affected.

SRASN: NPE-87-265

DOC NO: FCR-87-0031

SYSTEM:

DESCRIPTION OF CHANGE: A comprehensive review of the GGNS LLRT program was performed per a commitment in the response to Licensee Event Report (LER) 86-002-C. The review consisted of comparing as-built information from UFSAR Table 6.2-49, Technical Specification Table 3.6.4-1, Surveillance Procedure 06-ME-1M61-V-001, Rev. 27, Technical Section Instruction 09-S-08-2, Rev. 0, and the applicable P&IDs. Shortcomings/concerns identified in this review have been evaluated or addressed on a case-by-case basis. It was concluded that no design changes were necessitated due to the LLRT Program review. However, it was determined that UFSAR Section 5.4.9.3, Section 6.2.4.3.1.1.1 and Table 6.2-49 Note 7 require revision due to this review.

REASON FOR CHANGE: These changes were made to reflect actual test procedures and as-built conditions.

SAFETY EVALUATION: There is no increase in the probability of occurrence or in the consequences of an accident or malfunction of equipment important to safety previously evaluated in the Safety Analysis Report. The UFSAR changes do not involve hardware modifications to any existing plant equipment. The changes to UFSAR Section 5.4.9.3 and Section 6.2.4.3.1.1.1 are essentially only editorial changes and do not lessen the ability of the feedwater line valve alignments to meet the requirements of GDC 55 and/or SRP 6.2.4. The changes provide consistency regarding the description of the feedwater line valve alignment in UFSAR Sections 5.4.9.3 and 6.2.4.3.1.1.1. The change to UFSAR Table 6.2-49 Note 7 deletes the requirements for having to verify closed system integrity during periodic Type A testing. This requirement has not been met during previous Type A testing and furthermore, is not required per SRP 6.2.4, Paragraph II.6.e. The proposed change to Table 6.2-49 Note 7 will provide consistency with the SRP 6.2.4, Paragraph II.6.e requirements.

The change to UFSAR Table 6.2-49 Note 7 deletes Type A testing requirements concerning closed systems. The current UFSAR commitments concerning closed systems in Note 7 were not met during previous Type A tests because the affected closed systems' penetrations were in use or in standby to provide shutdown cooling. However, these commitments are not necessary per SRP 6.2.4, Paragraph II.6.e and therefore, will be removed from the UFSAR.

No hardware changes to existing plant equipment are made due to the UFSAR changes and no surveillance or testing requirements are changed which result in degrading equipment reliability and/or plant safety. The change to UFSAR Section 5.4.9.3 and Section 6.2.4.3.1.1.1 are essentially software only changes; no existing plant equipment is modified.

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## SAFETY EVALUATION: (Cont'd)

The equipment associated with these changes is equipment which is important to safety previously evaluated in the UFSAR. However, the only change to existing plant equipment and/or surveillance or testing requirements due to the UFSAR changes is that closed system integrity for the affected closed systems does not have to be demonstrated during periodic Type A testing. The deletion of this requirement is acceptable per SRP 6.2.4, Paragraph II.6.e. No changes are being made which would affect the operating parameters of the affected equipment. Therefore, there is no creation of a possibility for an accident or malfunction of a different type than any evaluated previously in the Safety Analysis Report. The UFSAR changes do not affect the operation of any system or degrade any equipment which reduces the margin of safety as defined in the basis of any technical specification. Therefore, the UFSAR changes do not reduce the margin of safety as defined in the basis of any technical specification.

SRASN: NPE-87-266

DOC NO: MNCR-86-0106

SYSTEM:

DESCRIPTION OF CHANGE: This software change added an oil demister not shown on P&ID M-1067G and changed equipment numbers on oil demisters located on the instrument and service air compressors.

REASON FOR CHANGE: This change updated the UFSAR to accurately reflect the "as-built" plant.

SAFETY EVALUATION: There is no increase in the probability of occurrence or in the consequences of an accident or malfunction of equipment important to safety previously evaluated in the Safety Analysis Report. The original system operation has not been altered. The instrument air system has no safety-related function as defined in Section 9.3.1.3 of the FSAR. Failure of this system will not compromise any safety-related component and will not prevent safe reactor shutdown. Therefore, there is no creation of a possibility for an accident or malfunction of a different type than any evaluated previously in the Safety Analysis Report.

This portion of the instrument air system is not addressed in the GGNS Tech. Spec. and has not been utilized in computing a margin of safety. Therefore, the margin of safety is not affected.

SRASN: NPE-87-267

DOC NO: NPEFSAR-87-0045

SYSTEM:

DESCRIPTION OF CHANGE: SERI developed and prepared an administratively controlled list of drywell and containment penetration barriers which include isolation valves, apertures and other potential release paths associated with each drywell and containment penetration. Some discrepancies between this document and the UFSAR were noted. A review was performed to compare the following:

|  |                    |
|--|--------------------|
| Containment and Drywell Boundaries   | M-7189, Rev. 2     |
| Containment Isolation Valve Information  | UFSAR Table 6.2-44 |
| Primary Reactor Containment Penetration and Containment Isolation Valve Leakage Rate Test List | UFSAR Table 6.2-49 |

Based on this review, four (4) valves were found missing from the UFSAR Tables, but are shown on the drawings M-7189, Rev. 2. Three of the missing valves are addressed by FSAR Change Request NPEFSAR 87/C19. The UFSAR Tables 6.2-44 and 6.2-49 are revised by this Change Request to show:

- One (1) missing valve
- Correct General Design Criteria Applicability
- Editorial Corrections

REASON FOR CHANGE: This change updated the FSAR to accurately reflect the "as-built" plant.

SAFETY EVALUATION: There is no increase in the probability of occurrence or in the consequences of an accident or malfunction of equipment important to safety previously evaluated in the Safety Analysis Report. These changes to the FSAR reflect current conditions and do not reduce the ability of the containment to properly function. The revisions to UFSAR tables do not result in hardware modification or operational or functional changes to the containment isolation. This revision of the UFSAR does not involve a component or system which is not analyzed in the UFSAR. These changes do not reduce the ability of the containment penetrations to perform their intended containment isolation function. Therefore, there is no creation of a possibility for an accident or malfunction of a different type than any evaluated previously in the Safety Analysis Report.

There is no reduction in the margin of safety as defined in the basis for the Technical Specification. The revision of UFSAR does not change the design conditions for operation applicable to the design requirements.

SRASN: NPE-87-268

DOC NO: MNCR-87-0092

SYSTEM:

DESCRIPTION OF CHANGE: MNCR 0092-87 reports a discrepancy between the statement in FSAR 11.4.2.4.7 process pump cleaning upon loss of power (second paragraph), which says that "De-energize-to-open solenoid valves provide a source of flushwater to the pump casing upon loss of electrical power" and the "as-built" condition of the plant in which the solenoid valves are de-energize-to-close models.

An engineering evaluation has determined that there is no functional or operational need for the fail-open feature because another method is used to flush the radwaste process pumps both during normal operation and for upset conditions.

This MNCR, changed the functional statement in the FSAR to reflect that a different method of flushing is utilized and that the fail-open feature is not required. Thus there is no change to hardware installed in the plant.

REASON FOR CHANGE: This MNCR documents the change in the FSAR that the subject solenoid valves are de-energize-to-close models. This change will show the "as-built" condition in the plant.

SAFETY EVALUATION: There is no increase in the probability of occurrence or in the consequences of an accident or malfunction of equipment important to safety previously evaluated in the Safety Analysis Report. The change does not affect a design feature which is capable of causing an entry into an accident described in UFSAR Chapter 15. Equipment of the radwaste systems is classified as safety class "other" in FSAR Table 3.2-1 and as such is considered to have no direct safety function.

There is no creation of a possibility for an accident or malfunction of a different type than any evaluated previously in the Safety Analysis Report. The feature being deleted is passive and does not affect function or performance of the radwaste waste transfer pumps or associated components. Equipment of the radwaste systems is classified as safety class "other" in FSAR Table 3.2-1 and as such is considered to have no direct safety function.

There is no reduction in the margin of safety as defined in the basis for any Technical Specification. The change does not affect either the Process Control Program or the dose to a member of the public in unrestricted areas which are the bases for Technical Specifications 3.11.3 and 3.11.4 respectively.

SRASN: NPE-87-269

DOC NO: FCR-87-0052

SYSTEM:

DESCRIPTION OF CHANGE: Item (m), "Fuel Oil day tank low-low or empty," is deleted from UFSAH Section 8.3.1.1.4.1.f(1), "Protection Systems."

REASON FOR CHANGE: UFSAH Section 8.3.1.1.4.1.f(1), item (m) incorrectly includes "Fuel Oil day tank low-low or empty" as a condition where the diesel generator is rendered incapable of responding to an emergency auto start signal. This change was made because there is no circuitry associated with this parameter that could prevent the diesel generator from responding to an emergency start signal.

SAFETY EVALUATION: There is no increase in the probability of occurrence or in the consequences of an accident or malfunction of equipment important to safety previously evaluated in the Safety Analysis Report. Fuel oil day tank level is indicated by plant instrumentation and alarms are periodically verified as required by GGNS Unit 1 Technical Specifications to insure adequate fuel level for the diesel generator. Protective circuitry to prevent the diesel generator from responding to an emergency start signal on a "fuel oil day tank level low-low or empty" condition is not necessary, and would not provide additional protection of the diesel generator system. Also, not having lockout circuitry for this parameter insures that the diesel generator is not prevented from performing its intended safety function due to spurious operation of such circuitry, in keeping with reliability considerations for the diesel generator system.

There is no creation of a possibility for an accident or malfunction of a different type than any evaluated previously in the Safety Analysis Report. No new accident possibilities are created by not providing the described diesel generator trip, in that this feature would not improve operation of the diesel generator system under a condition of "fuel oil day tank low-low or empty", and is not required to protect the diesel generator from damage due to this condition. Thus, malfunctions of the diesel generator system remain bounded by existing analysis for such failures. Also, not providing this trip minimizes circuitry which could inadvertently trip the diesel generator and prevent it from performing its intended safety function.

A diesel generator trip on day tank fuel level is not addressed by GGNS Unit 1 Technical Specification bases and not providing such a trip will not reduce diesel generator system performance as described by Technical Specification bases.

SRASN: NPE-87-270

DOC NO: NPEFSAR-87-0054

SYSTEM:

DESCRIPTION OF CHANGE: This Safety Evaluation addresses changes made to UFSAR Sections 3.5 and 3.6 and Appendix 3C. These changes are:

- o Replace existing UFSAR Figures for high energy line breaks and internal missiles with controlled engineering drawings.
- o Add UFSAR figures for 2 inch and under high energy lines based on controlled engineering drawings.
- o Remove existing UFSAR Tables for high energy line stresses.
- o Incorporate the evaluation of high energy line breaks performed per DCA NPE-86-122(1) in the vicinity of RWCU drywell isolation valve F251 (RWCU heat exchanger room).

REASON FOR CHANGE: This change updated the FSAR to reflect a change in the way stress calculations are controlled by the UFSAR and to incorporate certain design changes.

SAFETY EVALUATION: There is no increase in the probability of occurrence or in the consequences of an accident or malfunction of equipment important to safety previously evaluated in the Safety Analysis Report. The UFSAR changes update the information on high energy line break and internal missiles by replacing existing UFSAR figures with controlled engineering drawings, adding new drawings for lines already discussed in the UFSAR, removing high energy line stress tables and adding a discussion of the evaluation of high energy line breaks in the RWCU heat exchanger room. These changes do not affect the results of the high energy line break or internally generated missile analyses described in the UFSAR. They clarify and provide additional information. These changes are not the result of any changes in the high energy line break or internally generated missile analyses. There is no affect on the description of the systems or components used in mitigating the high energy line breaks or internally generated missiles, nor are there any changes to the "Sequence of Events" description. The incorporation of the evaluation performed for the breaks postulated in the RWCU heat exchanger room (drywell outboard isolation valve F251) demonstrates the capability for drywell isolation. These UFSAR changes do not reflect any (1) changes to material or construction standards for any system, (2) bypass of system design features, (3) changes to power supplies, (4) modifications to instrument accuracies, (5) decrease in auxiliary system (HVAC, CCW, etc.) capabilities, (6) system operational changes, or (7) decrease in system integrity.

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## SAFETY EVALUATION: (Cont'd)

There is no creation of a possibility for an accident or malfunction of a different type than any evaluated previously in the Safety Analysis Report. These changes clarify and supplement the discussion of high energy line breaks and internally generated missiles. These changes are not the result of changes to assumed system or component failure modes, nor are they associated with any component or system whose failure would be outside the category of accidents in UFSAR Chapter 15. These changes do not modify or add to the UFSAR discussion of malfunctions of equipment. Except for the changes due to DCP 83/4100, these changes are not the result of any plant modifications and could not, therefore induce a transient which would lead to a malfunction of equipment or cause an equipment failure outside the categories described in the UFSAR. The safety evaluation for DCP 83/4100 did not identify equipment malfunctions different than evaluated in the UFSAR.

These UFSAR changes do not affect the operation of system parameters like flow, chemistry, power, set point, capacity, level and pressure. The changes do not degrade electrical power systems. They do not degrade the ability of instrumentation to monitor important parameters nor do they degrade equipment in such a way that safety margins are reduced. Therefore, they do not reduce the margin of safety as defined in the basis for any Technical Specifications.

SRASN: NPE-87-271

DOC NO: MNCR-86-0618

SYSTEM:

DESCRIPTION OF CHANGE: Root valve SP66FX004 shows up twice on P&ID M-0034A. Per FSK-I-0034A-302-W, one of the root valves was changed to SP66FX005.

REASON FOR CHANGE: This change updated the UFSAR to reflect the "as-built" plant.

SAFETY EVALUATION: There is no increase in the probability of occurrence or in the consequences of an accident or malfunction of equipment important to safety previously evaluated in the Safety Analysis Report. The original system operation has not been altered, only valve numbers were changed. The domestic water system has no safety-related function as defined in Section 9.2.4.3 of the FSAR. Failure of this system will not compromise any safety-related component and will not prevent safe reactor shutdown. Therefore, there is no creation of a possibility for an accident or malfunction of a different type than any evaluated previously in the Safety Analysis Report.

The domestic water system is not addressed in the GGNS Tech. Spec. and has not been utilized in computing a margin of safety. Therefore, the margin of safety is not affected.

SRASN: NPE-87-273

DOC NO: LAS-7018

SYSTEM:

DESCRIPTION OF CHANGE: The UFSAR text was revised including several tables and figures for UFSAR Section 15.7.6 based on revised analyses for fuel handling accidents inside containment.

REASON FOR CHANGE: These changes (1) clarify the discussion of a fuel handling accident (FHA) inside containment, so that it more clearly describes the assumptions and results of Bechtel Mechanical Calculation No. 5.3.43, Revision 0 and (2) incorporate editorial corrections.

Calculation No. 5.3.43 assesses the offsite radiological consequences of a FHA (either in containment or in the auxiliary building) with the containment equipment hatch open. The results of this calculation were incorporated into the FSAR in Amendment 47.

SAFETY EVALUATION: There is no increase in the probability of occurrence or in the consequences of an accident or malfunction of equipment important to safety previously evaluated in the Safety Analysis Report. The UFSAR changes provide clarification of the assumptions and results in the FHA analyses. These changes are not the result of any changes in the FHA analyses, nor are they due to any plant modifications. They do not reflect any (1) changes to material or construction standards for any system, (2) bypass of system design features, (3) changes to power supplies, (4) modifications to instrument accuracies, (5) decrease in auxiliary system (HVAC, CCW, etc.) capabilities, (6) system operational changes, or (7) decrease in system integrity. The UFSAR changes do not affect the results of the FHA analyses described in the UFSAR. There is no affect on the description of systems or components used in mitigating the FHA, nor are there any changes to the "Sequence of Events" description.

The proposed UFSAR changes do not affect the UFSAR discussion of any equipment, nor are they the result of any changes to or addition of any equipment. The changes are not the result of any changes in the original material or construction practices used to support, separate or environmentally qualify equipment, nor are they due to the imposition of new loads, the changing of component protection features or the degradation of support system performance.

There is no creation of a possibility for an accident or malfunction of a different type than any evaluated previously in the Safety Analysis Report. The UFSAR changes clarify the discussion of a FHA inside containment with the equipment hatch open. These changes are not the result of change to assumed system or component failure modes, nor are they associated with any component or system whose failure would be outside the category of accidents in UFSAR Chapter 15.

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## SAFETY EVALUATION: (Cont'd)

The UFSAR changes do not modify or add to the UFSAR discussion of malfunctions of equipment. These changes are not the result of any plant modifications and could not, therefore, induce a transient which would lead to a malfunction of equipment or cause an equipment failure outside the categories described in the UFSAR.

There is no reduction in the margin of safety as defined in the basis for any Technical Specification. The bases for Technical Specifications 3/4.6.1.1 and 3/4.6.1.3 indicate that the requirements regarding primary containment integrity are imposed to assure that post accident doses are within 10CFR100 limits. Since the UFSAR currently shows that doses following a FHA with the equipment hatch open are below 10CFR100 limits and the changes do not affect these doses, the margin of safety defined in the basis of these Technical Specifications is not reduced.

SRASN: NPE-87-274

DOC NO: MNCR-86-1197

SYSTEM: P75

DESCRIPTION OF CHANGE: MNCR 1197-86 documents the deficiencies noted on NRC Inspection Reports 50-416/86-26 and 50-417/86-04 paragraphs 7a, 7b, and 7d. These deficiencies consist of incorrect P75 valve numbering and omission of root valves on P&IDs.

REASON FOR CHANGE: This change updates the UFSAR to reflect the "as-built" condition of the plant.

SAFETY EVALUATION: There is no increase in the probability of occurrence or in the consequences of an accident or malfunction of equipment important to safety previously evaluated in the Safety Analysis Report. The ability of the system to perform its safety function is not affected by correcting the drawing deficiencies. The drawing deficiencies do not change the FSAR failure analysis. The standby diesel generator's components are not affected by MNCR 1197-86. The omission of root valves on P&IDs and the incorrect numbering would not create the possibility of an accident of a different type. Therefore, there is no creation of a possibility for an accident or malfunction of a different type than any evaluated previously in the Safety Analysis Report. Also, since no equipment is being installed the margin of safety as defined in the Technical Specification bases remains unchanged.

SRASN: NPE-87-275

DOC NO: MNCR-86-0586

SYSTEM: P45

DESCRIPTION OF CHANGE: This safety evaluation is for the software change to P&ID M-1094E for changing the floor and equipment drain system valve F094 to the open position.

REASON FOR CHANGE: This change is to reflect the correct position of valve F094 on P&ID M-1094E.

SAFETY EVALUATION: There is no increase in the probability of occurrence or in the consequences of an accident or malfunction of equipment important to safety previously evaluated in the Safety Analysis Report. The system operation has not been altered. The floor and equipment drain system is not considered to be safety related per Section 9.3.3.3.c of the FSAR. Failure of this system will not compromise any safety related component and will not prevent safe reactor shutdown. Also, there is no creation of a possibility for an accident or malfunction of a different type than any evaluated previously in the Safety Analysis Report.

This portion of the floor and equipment drain system is not addressed in the GGNS Technical Specifications and has not been utilized in computing a margin of safety. Therefore, the margin of safety is not affected.

SRASN: NPE-87-276

DOC NO: NPEFSAR-87-0058

SYSTEM: P64

DESCRIPTION OF CHANGE: This change revises drawing M-0035B (UFSAR Figure 9.5-2) to show the 4" JBD-1055 (Secondary Containment Isolation Bypass Fire Protection Line) connected to the 10" JBD-202 between valves F194 and F195.

REASON FOR CHANGE: To reflect actual plant conditions, and to disposition QDR 287-86. QDR 287-86 had identified a discrepancy between drawings M-0035B and M-0146K. It was determined that drawing M-0146K represented actual plant configuration, which necessitated the revision to M-0035B (UFSAR Figure 9.5-2).

SAFETY EVALUATION: This is a drawing change only, and does not affect the P64 design basis. It meets all material and construction standards. It does not cause any component to operate outside design limits, and no new failure modes are created. Therefore, there is no increase in the probability or consequences of an accident or of a malfunction of equipment important to safety. Similarly, there is no possibility of an accident or malfunction of equipment different from any previously evaluated. Since this change does not affect any system operation or function, and since no limiting condition for operation or surveillance requirement of any Technical Specification is affected, there is no reduction in any margin of safety.

SRASN: NPE-87-277

DOC NO: NPEFSAR-87-0059

SYSTEM:

DESCRIPTION OF CHANGE: This safety evaluation addresses (1) the impact of relocating a large portion of the seismic qualification details from UFSAR Section 3.10 to the Seismic Qualification Central File (SQCF), (2) the addition of UFSAR text detailing GGNS operational stage seismic qualification criteria and practice, and (3) the general update of UFSAR statements which address GGNS compliance with IEEE qualification standards.

REASON FOR CHANGE: To provide more current and complete control of the GGNS seismic qualification program through the GGNS Seismic Qualification Central File.

SAFETY EVALUATION: This change provides more current information on the GGNS environmental and seismic qualification programs without reducing the level of qualification for either. Therefore, there is no increase in the probability or consequences of an accident previously evaluated in the FSAR. Since no changes are made to the SQCF without a 10CFR50.59 Safety Evaluation, and since this is consistent with the previous NRC review of GGNS seismic and environmental qualification documentation there is no increase in the probability or consequences of a malfunction of equipment important to safety previously evaluated in the FSAR. Since the current level of seismic and environmental qualification is maintained, there is no possibility of a new accident or malfunction of equipment important to safety. Since there is no change in current operating practice or a relaxation of design control for any system, there is no reduction in the margin of safety for any Technical Specification.

SRASN: NPE-87-278

DOC NO: NPEFSAR-87-0066

SYSTEM: N41

DESCRIPTION OF CHANGE: This change increases the allowable interval for surveying the Turbine Generator Pedestals, as discussed in the UFSAR Subsection 2.5.4.13.1.

REASON FOR CHANGE: The surveying interval change decreases doses to plant personnel for maintaining ALARA.

SAFETY EVALUATION: The maximum allowable settlement or differential settlement allowed by the FSAR is unaffected by these changes. The settlement marks will continue to permit measurements to be made. Overall ability of the settlement program to measure settlement is not affected. Therefore, there is no increase in the probability or consequences of an accident. Based on FSAR Figs. 2.5-7a - 2.5-75h, settlement of Unit 1 has essentially remained unchanged since 1979. Therefore, the time interval change has inconsequential results. Also, the function and acceptance criteria of the survey remain unchanged. Therefore, there is no increase in the probability or consequences of a malfunction of equipment important to safety. Since the settlement marks are not attached to any equipment important to safety, and since the intent of the survey program is not changed, there is no possibility of a new type of accident or malfunction of equipment. Because the criteria defining excessive settlement are not affected by this change, there is no reduction in the margin of safety.

SRASN: NPE-87-279

DOC NO: NPEFSAR-87-0067

SYSTEM: P41

DESCRIPTION OF CHANGE: This change revises the FSAR to state that credible passive SSW failures that can result in a loss of fluid after an accident are limited to pump or valve seal leakage, not pipe rupture.

REASON FOR CHANGE: To provide consistency with the guidance published in NUREG-0318 and SECY-77-439.

SAFETY EVALUATION: There are no physical changes made to the SSW system or to the ultimate heat sink, and there are no changes to the material or construction standards for either. There are no operational or functional changes. Therefore, there is no increase in the probability of an accident previously evaluated. Since the FSAR analyses do not assume an additional pipe break or crack concurrent with an accident, these changes do not affect any accident analysis or "Sequence of Events" description. Therefore, there is no increase in the consequences of an accident previously evaluated. Because there is no effect on any system operation or function or any analysis, there is no increase in the probability or consequences of a malfunction of equipment important to safety. Since the changes are not the result of any plant modification or of changes to any assumed system or component failure mode, there is no possibility of a type of accident or malfunction different from previously evaluated. Because the changes are not the result of plant changes which would effect the SSW system, iPCS service water system, or ultimate heat sink, there is no reduction in the margin of safety as defined in the basis for any Technical Specification.

SRASN: NPE-87-280

DOC NO: NPEFSAR-87-0070

SYSTEM:

DESCRIPTION OF CHANGE: This safety evaluation addresses changes to the UFSAR Section 9.2.1 and 9.2.5 Ultimate Heat Sink (UHS) cooling tower performance analysis. These changes (1) clarify the discussions of the Regulatory Guide 1.27 Ultimate Heat Sink (UHS) cooling tower performance analysis, so that it reflects system capabilities assuming single unit operation, (2) incorporate the peak heat load for the Unit 1 high density spent fuel storage racks (HDSFSR), and (3) incorporate the UHS cooling tower performance analysis results assuming single unit operation and peak HDSFSR heat load. UFSAR figures were also updated to reflect analysis results.

REASON FOR CHANGE: These changes to the UFSAR were incorporated to reflect new UHS cooling tower performance analyses.

SAFETY EVALUATION: There is no increase in the probability of occurrence or in the consequences of an accident or malfunction of equipment important to safety previously evaluated in the Safety Analysis Report.

The Regulatory Guide 1.27 UHS cooling tower performance analysis discussed in UFSAR Sections 9.2.1 and 9.2.5 considers three modes of SSW system operation. Mode I - normal shutdown of Units 1 and 2 with offsite power; Mode II - normal shutdown of Units 1 and 2 without offsite power; and Mode III - loss of coolant accident (LOCA) in one unit coincident with the worst single active failure of an engineered safety feature (ESF) component in that unit with normal shutdown of the remaining unit and total loss of offsite power to both units. As stated, Mode III is the critical mode for evaluating the capability of the SSW system and the UHS to perform their safety functions assuming both units are in operation.

The UFSAR change presents the results of an UHS cooling tower performance analysis prepared for an additional operating mode assuming single unit operation and peak (eighteenth refueling outage) HDSFSR heat load. This analysis for the additional mode of operation is based on the assumptions that a LOCA occurs in Unit 1 and Unit 2 is not operational, that total loss of offsite power to Unit 1 occurs, that the worst single active failure occurs in Unit 1 (loss of one of the two standby diesel generators which removes one of the two SSW loops from operation), that no makeup water is available to the SSW cooling tower basins for 30 days (the SSW siphon is assumed operational), and that the worst 30-day site meteorological conditions occur. Assuming Unit 2 is not operational, these assumptions result in the greatest heat rejection rate for the UHS during the most severe meteorological conditions following the DBA.

SRASN: NPE-87-280

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## SAFETY EVALUATION: (Cont'd)

Analysis results presented in the UFSAR changes assure the operability of the SSW system and the UHS under the postulated accident conditions considering the unavailability of Unit 2 equipment to effect the transfer of heat from the basin inventories and considering the peak heat load of the HDSFSR. Furthermore, the clarifications to UFSAR Sections 9.2.1 and 9.2.5 to reflect system capabilities assuming single unit operation and the incorporation of the peak heat load of the HDSFSR do not change the applicable SSW system or UHS design, material, and construction standards; bypass the SSW system or UHS design features; degrade overall SSW system or UHS reliability; cause the SSW system or UHS to operate outside design limits; or decrease SSW system or UHS integrity. Therefore, the proposed UFSAR change does not increase the probability of occurrence of an accident previously evaluated in the UFSAR.

As stated in UFSAR Sections 9.2.1 and 9.2.5, the UHS cooling tower performance analysis, which postulates a DBA coincident with the most adverse meteorological conditions, has demonstrated that the UHS mechanical draft cooling towers are capable of providing safety related water at less than the design basis return water temperature of 90°F. The UFSAR further states that the analysis maximum return water temperature of 89.5°F is based on a heat rejection rate of a 3-hour period (for worst corresponding 3-hour meteorological condition) during the first day of DBA conditions.

For the single unit operation analysis a maximum return water temperature of 90.5°F, based on a 3-hour heat rejection rate and corresponding worst 3-hour meteorological conditions, was calculated. This is 0.5 degrees higher than the design basis return water temperature of 90 degrees.

As documented in NUREG-0831 Supplement 2, however, the existing UFSAR UHS cooling tower analysis did not take credit for the damping effect of the large volume of cold water initially at a temperature between 65 and 75°F in the SSW basins. Specifically, the existing analysis assumes that the cooled water falling from the cooling tower is returned to the plant systems via the SSW system. In actuality, the cooled water (approximately 80 to 90°F) drains onto the surface of the SSW basin and is subsequently withdrawn from the bottom of the basin for circulation to the plant systems. Since the peak heat load and peak basin cold water temperature occur on the first day of the DBA, the large volume of cold water initially in the basin would have significant damping effect on the return water temperatures. Therefore, the actual return water temperature would be significantly less than the 89.5°F predicted.

SRASN: NPE-87-280

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## SAFETY EVALUATION: (Cont'd)

Similarly, the single unit operation analysis conservatively did not take credit for the damping effect of the large volume of cold water initially in the SSW basins. Therefore, the actual return water temperature for the single unit operation analysis would also be significantly less than the 90.5°F predicted. An 88.8°F return water temperature based on the results of a separate analysis performed assuming complete mixing of the basin cold water and the UHS cooling tower return water, with no heat conduction through the basin floor or walls, substantiates this statement.

Since analysis results presented in the UFSAR changes 1) assure the operability of the SSW system and the UHS, 2) demonstrate the capability of the UHS to provide cooling water to the SSW system below design basis temperatures for 30 days, and 3) verify the capacity of the SSW basins during adverse meteorological conditions, the consequences of any accidents previously described in the UFSAR will not be increased.

The SSW system and UHS operational reliability per the original design as described in the UFSAR has not changed. The UFSAR changes reflect system capabilities assuming single unit operation and incorporation of the peak heat load of the HDSFSR. The changes do not change the SSW system or UHS protection features; downgrade SSW or UHS supported systems; reduce SSW system or UHS redundancy or independence; cause the SSW system or UHS to operate outside design limits; or decrease SSW system or UHS integrity. Therefore, there is no creation of a possibility for an accident or malfunction of a different type than any evaluated previously in the Safety Analysis Report. The analysis results and UFSAR changes assure that the assumptions made in the UFSAR regarding the operation of the SSW system and UHS following an accident are consistent with system design. Since the SSW system and UHS response to accidents described in the UFSAR remain unchanged, no failure modes outside those described in the UFSAR will be created. Also, since the SSW system and UHS response to equipment malfunctions described in the UFSAR remain unchanged, no equipment failure modes outside those described in the UFSAR will be created.

The basis of Technical Specifications 3/4.7.1.1, 3/4.7.1.2, and 3/4.7.1.3 assumes that the operability of the SSW system and UHS ensures that sufficient cooling capability will be available for continued operation of safety related equipment during normal and accident conditions, even with a single failure in one of the redundant SSW loops. The analysis results and UFSAR changes do not affect this basis, but instead reaffirm the as designed operational functionality of the SSW system and UHS, and reaffirms the integrity of the UHS inventory.

SRASN: NPE-87-281

DOC NO: FCR-87-0071

SYSTEM: E51

DESCRIPTION OF CHANGE: This change reflects the maximum differential pressures for valves E51F019, F022, F025, F026, F045, F046, F054, F059, F063, F064, F076, F095, listed in the UFSAR.

REASON FOR CHANGE: To reflect the higher maximum differential pressures determined by I&E Bulletin 85-03 and listed in General Electric Design Specification 22A3124AJ Revision 18.

SAFETY EVALUATION: The valves in question were all originally designed to operate against the maximum differential pressures listed in IEB 85-03 or G.E. Design Specification, as appropriate. The design function of the valves is not altered. Therefore, there is no increase in the probability or consequences of an accident or malfunction of equipment important to safety previously evaluated in the FSAR. Since the valves remain within their design limits and their design function is unaltered, there is no possibility of an accident or malfunction of equipment different from previously evaluated. There is no impact on the margin of safety.

SRASN: NPE-87-282

DOC NO: NPEFSAR-87-0073

SYSTEM: P47

DESCRIPTION OF CHANGE: This change adds a fourth radial well to the Plant Service Water System description in UFSAR Section 9.2.10.

REASON FOR CHANGE: The fourth well provides an additional source of water for plant operation increasing PSW supply flexibility to the plant.

SAFETY EVALUATION. The radial wells have no safety related function and are not required to shut down the reactor after a LOCA. The addition of another radial well will increase the reliability of the Plant Service Water System. Therefore, there is no increase in the probability or consequences of an accident or malfunction of equipment important to safety. Since excess water can be bypassed, there is no possibility of an accident or malfunction of equipment different from previously evaluated. The new well provides greater flexibility to meet varying plant needs, and therefore this change does not reduce the margin of safety as defined in the basis for any Technical Specification.

SRASN: NPE-87-283

DOC NO: QDR-010-87

SYSTEM: P64

DESCRIPTION OF CHANGE: Valve P64-F036 was shown as locked open on P&ID M-0035K, Rev. 4. Per the System Operating Instructions, 04-S-01-P64-1, Rev. 20 and the Surveillance Procedure 06-OP-SP64-M-0011, Rev. 26, these fire protection system valves providing an interface between Unit 1 and 2 are locked closed. P&ID M-0035K, Rev. 4 was revised to reflect the locked closed valve position and results in a change to the UFSAR.

REASON FOR CHANGE: The fire water supply system is common to both Units 1 and 2. The P&ID was revised to more clearly reflect those portions of the fire loops which are required for Unit 1 operation and those which are for Unit 2 and to reflect the correct valve position.

SAFETY EVALUATION: There is no increase in the probability of occurrence or in the consequences of an accident or malfunction of equipment important to safety previously evaluated in the Safety Analysis Report. The changes made to the P&ID do not result in a change to system operation. The changes were made to more clearly reflect those portions of the fire loops required for Unit 1 operation and to reflect the correct valve positions. Also, there is no creation of a possibility for an accident or malfunction of a different type than any evaluated previously in the Safety Analysis Report. There is no reduction in the margin of safety as defined in the basis for any technical specification.

SRASN: NPE-87-284

DOC NO: AECM-85-0059

SYSTEM:

DESCRIPTION OF CHANGE: Subsection 7.5 of the FSAR is being revised to incorporate the following changes.

- 1) 7.5.1.2.6 - Revise instrument ranges in para (a) and (c) to reflect correct ranges.
- 2) 7.5.1.2.14 - Add this subsection to discuss indication for reactor coolant leakage verification.
- 3) 7.5.1.3.b - Added Standby Service Water System as a shared system.

In addition to the above changes, the specific instrument accuracy information listed in Table 7.5-1 was removed.

REASON FOR CHANGE: The three number changes listed above reflect changes to the R.G. 1.97, Rev. 2 position report previously submitted to the NRC. The changes were identified during the incorporation of the GGNS R.G. 197, Rev. 2 position into the UFSAR.

The specific instrument accuracy information listed in Table 7.5-1 were removed because these accuracies were not developed using a consistent methodology which considers all of the appropriate effects. These values will be superseded by the accuracy values determined and controlled as a part of the Instrumentation and Setpoint Control Program.

SAFETY EVALUATION: The information corrected or added does not affect the operation of any plant equipment nor does it reflect a change to the plant design or equipment which directly indicate the consequences of an accident. All of the changes addressed by this evaluation are intended to clarify existing conditions and do not constitute a change to existing commitments or hardware.

The instrument accuracy information in Table 7.5-1 is for indication. Removal of this information from the FSAR does not affect existing setpoints or controls. All required trip settings remain unchanged because the accuracy values listed were not considered in determining existing values. The removed instrument accuracy information is to be maintained as part of the Instrumentation and Setpoint Control Program. Because these changes do not alter any existing plant commitments or design, no new accident precursors are being introduced. Because these changes do not alter any existing plant commitments or design, no new types of equipment failures can be created.

The correction and addition of the subject information does not affect any variables addressed by the Technical Specifications.

SRASN: NPE-87-284

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SAFETY EVALUATION: (Cont'd)

The instrument accuracy information presently shown in Table 7.5-1 was not used for any of the bases for determination of the Technical Specification nominal trip setpoints or Technical Specification limits.

SRASN: NPE-87-286

DOC NO: DCP-87-4019

SYSTEM: Z17

DESCRIPTION OF CHANGE: This change provides tornado depressurization protection for penetration CV-47B between the turbine building and the control building by installing a high energy check damper.

REASON FOR CHANGE: To comply with UFSAR Section 3.8.4.1.1.5 and address the non-conformance documented in MNCR 192-87.

SAFETY EVALUATION: The high energy check damper and the section of duct in which it is installed are seismically qualified and will provide adequate depressurization protection during a design basis tornado. The HVAC system for the hot machine shop, for which the exhaust duct was installed, is not safety related and is not required to help mitigate the consequences of an accident. Therefore, there is no increase in the probability or consequences of an accident or of a malfunction of equipment important to safety previously evaluated in the UFSAR. Installation of the high energy check damper and the safety related section of ductwork does not create any new failure mode. Should the damper inadvertently close, the exhaust system will shut down on low flow. Therefore, the change does not create the possibility of an accident or of a malfunction of equipment important to safety of a type different from any previously evaluated in the FSAR. There is no reduction in the margin of safety as defined in the basis for any technical specification.

SRASN: NPE-87-292

DOC NO: QDR-86-448

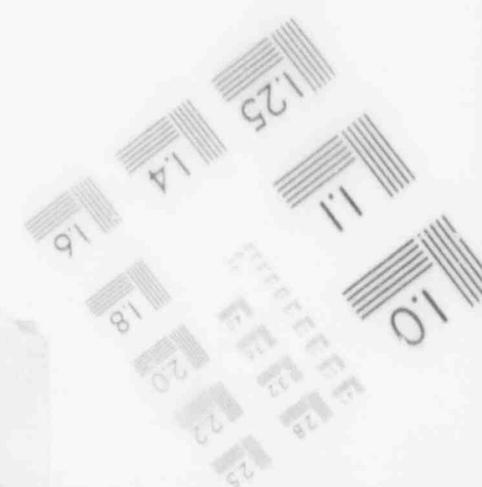
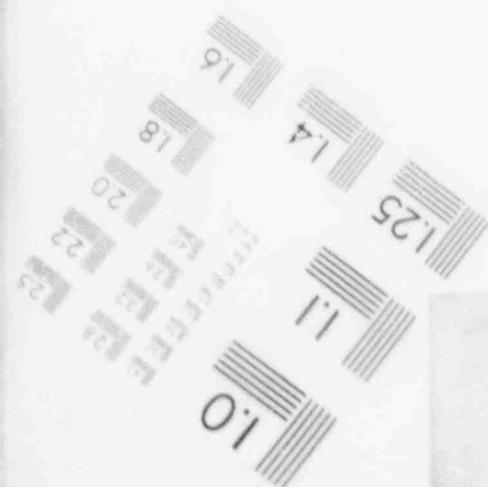
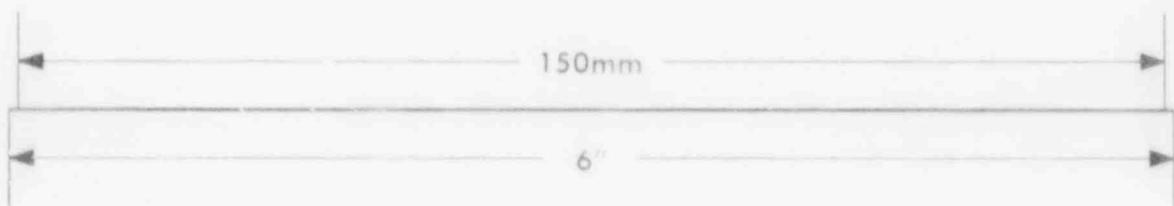
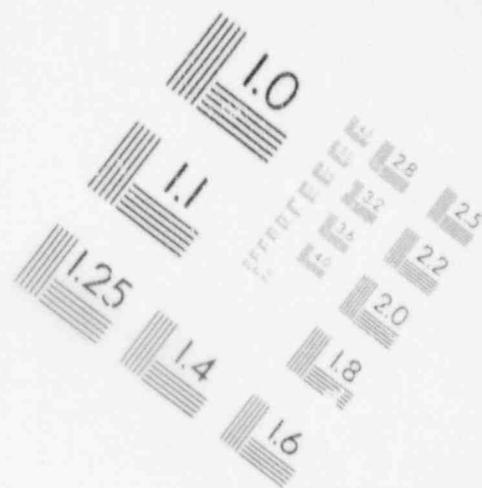
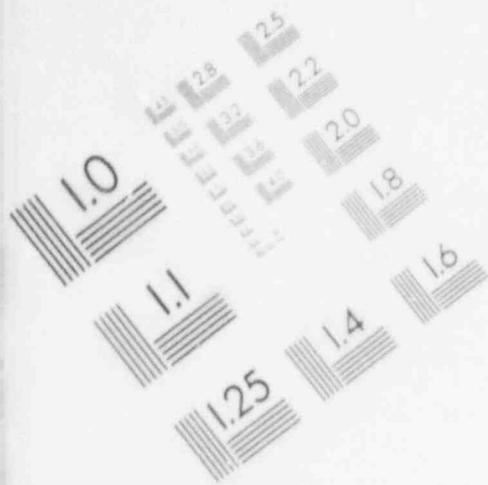
SYSTEM: C41

DESCRIPTION OF CHANGE: This change correctly identifies valve Q1C41F007 as a modified stop check valve instead of as a simple check valve in UFSAR Figure 9.3-24.

REASON FOR CHANGE: This change revises UFSAR Figure 9.3-24.

SAFETY EVALUATION: The modified stop check valve is the same as a simple check valve in function and operation. This change is a drawing change only and has no effect on any plant operation or equipment. Therefore, there is no increase in the probability or consequences of an accident or of a malfunction of equipment important to safety. No new failure modes are created by this change. Therefore, there is no increase in the probability of an accident or of a malfunction of plant equipment different from any previously evaluated in the FSAR. Since there is no impact on any plant system or operation, there is no reduction in the margin of safety as defined in the basis for any Technical Specification.

IMAGE EVALUATION  
TEST TARGET (MT-3)



SRASN: NPE-87-293

DOC NO: QDR-87-0063

SYSTEM: E61

DESCRIPTION OF CHANGE: This change revises UFSAR Figure 6.2-81 to replace flow control valve N1E61F515 with a restricting orifice.

REASON FOR CHANGE: To reflect a software only change for the "as built" condition of the plant.

SAFETY EVALUATION: The restricting orifice also provides a reliable means of regulating the flow of cooling water entering the compressor at the design value. The containment purge system is non-safety related and non-redundant. Failure of this system, excluding those portions of it which form the containment boundary, will not compromise any safety related systems or components or prevent a safe reactor shutdown. Therefore, there is no increase in the probability or consequences of an accident, nor an increase in the probability or consequences of a malfunction of equipment important to safety. Since this is a software only change and since no safety related systems or safe shutdown components are affected, there is no possibility of an accident or malfunction of equipment of a type different from any previously evaluated in the FSAR. There is no reduction in any margin of safety as defined in the basis for any Technical Specification.

SRASN: NPE-87-294

DOC NO: MNCR-218-87

SYSTEM: N22

DESCRIPTION OF CHANGE: This change removes the computer point from service air pressure switch (N22N027) and adds a new identification number to the alarm, as shown in UFSAR Figure 10.4-9g.

REASON FOR CHANGE: To reflect software only changes made to UFSAR Figure 10.4-9g based on the existing plant design in the field.

SAFETY EVALUATION: This change will not affect the normal operating functions of the Condensate Cleanup System, or of the Suppression Pool Cleanup System, or of any safety related system. It will not prevent safe reactor shutdown. Therefore, there is no increase in the probability or consequences of an accident or of a malfunction of equipment important to safety. Nor is there a possibility of an accident or malfunction of equipment of a type different from any previously evaluated. Since this change has no physical effect on any plant function or operation, there is no reduction of the margin of safety as defined in the basis for any Technical Specification.

SRASN: NPE-87-295

DOC NO: FCR-NPE-86-12

SYSTEM:

DESCRIPTION OF CHANGE: This change revises FSAR Section 7.1.2.2.4.1.a to permit RPS cables outside the Main Protection System cabinets to run with other ESF wiring of the same division in the same raceway system.

REASON FOR CHANGE: To correct UFSAR Section 7.1.2.2.4.1.a which stated that RPS cabling runs separately from all other wiring in its own totally enclosed raceway system.

SAFETY EVALUATION: Since this activity does not affect overall performance of the RPS or ESF systems or components, there is no increase in the possibility or consequences of an accident previously evaluated in the FSAR, and no increase in the probability of a malfunction of equipment important to safety. An analysis indicates that all potential faults will not create unsafe conditions which will prevent a scram. Therefore, there is no increase in the consequences of a malfunction of equipment important to safety. Nor is there a possibility of an accident or malfunction of equipment different from any previously evaluated in the FSAR. Since this change does not affect any RPS requirements governed by Technical Specifications, there is no reduction in the margin of safety.

SRASN: NPE-87-299

DOC NO: Deep Draft Pumps

SYSTEM:

DESCRIPTION OF CHANGE: This safety evaluation bases the schedule for inspection, overhaul, alignment, and impeller lift adjustments of deep draft pumps on test results of ASME Section XI (IWP-3000).

REASON FOR CHANGE: These pumps are operated infrequently during the plant lifetime, and ASME Section XI is a better source of operating experience than actual GGNS experience.

SAFETY EVALUATION: The loss or unavailability of these pumps in itself is not an initiating event for an accident. This program is a modification in the preventive maintenance program and does not increase the probability of occurrence of any type of accident. Since pump operability is ensured by this maintenance program, there is no increase in the consequences of an accident. The ASME Section XI Inservice Testing Program confirms the operable status of the pumps. Therefore, there is no increase in the probability or consequences of a malfunction of equipment important to safety; also there is no possibility of a malfunction of equipment different from previously evaluated.

The use of ASME Section XI (IWP-3000) testing will provide adequate assurance of the operational readiness of the subject pumps. This is consistent with industry practice, supplier recommendations, and accumulated operating experience. Consequently, no new failure modes for the pumps or other equipment are introduced. The existing basis for the technical specifications will not be affected by the proposed program change. Therefore, the margin of safety as defined in the basis for any technical specification is not reduced.

SRASN: NPE-87-301

DOC NO: FCR-86-0100

SYSTEM:

DESCRIPTION OF CHANGE: Technical Specification 3/4.6.2.2 requires that periodic low pressure (3.0 psid) drywell bypass leakage tests be performed to assure that drywell bypass leakage is within acceptable limits. UFSAR Section 6.2.6.5.1 states that the test will be performed with water in the upper containment pool and suppression pool filled to their normal level. The UFSAR revision will allow performance of this periodic low pressure test with no water in the upper containment pool. No changes are being made to the suppression pool level requirement.

REASON FOR CHANGE: To allow greater flexibility in the timing of the drywell bypass leakage test with other outage activities.

SAFETY EVALUATION: The periodic drywell bypass leakage test is performed to demonstrate that bypass leakage is less than the amount assumed in the UFSAR accident analyses. The acceptance criteria for this test are based on the assumed leakage in the accident analyses. The acceptance criteria do not change as a result of the UFSAR changes.

The changes allow the drywell bypass leakage test to be performed in a manner which should result in bypass leakage equivalent to or greater than the current test method. The basis for this conclusion is:

When the upper containment pool (UCP) is filled, a vertical compressive load is transmitted to the drywell cylindrical wall. This compressive load would reduce the axial tension on the wall caused by the internal pressurization of the drywell. Reduction of the axial tension would tend to reduce crack formation in the wall during the test and minimize bypass leakage.

The water in the UCP exerts a downward pressure on the drywell roof (i.e., the UCP floor). This tends to reduce the magnitude of the tensile stresses that would otherwise occur on the underside of the annular roof slab due to the internal pressurization of the drywell. Reduction of the tensile stresses would tend to reduce crack formation during the test and minimize bypass leakage.

The water in the UCP exerts a downward pressure on the drywell head, which provides an additional compressive load on the compression seals located at the drywell head support assembly. The absence of this hydrostatic pressure load on the seals would tend to increase bypass leakage through the seals.

SRASN: NPE-87-301

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## SAFETY EVALUATION: (Cont'd)

Elimination of the water load on the drywell walls and UCP liner plate removes these mechanisms for reducing bypass leakage and, therefore, potentially result in a higher bypass leakage. This conclusion indicates that the changes yield a more conservative bypass leakage rate than the current test method. Since this revised test method yields more conservative results, it is considered acceptable.

Additionally, the structural integrity of the drywell assembly is not impaired by the proposed change since the effects of the reduced pressure (3.0 psid) test without the hydrostatic head of water in the UCP are bounded by the effects resulting from the preoperational design pressure (30 psid) test.

From the above discussion, it can be seen that the UFSAR changes do not affect any assumptions made in the UFSAR accident analyses. They do not, therefore, increase the probability of occurrence of an accident previously evaluated in the UFSAR.

Therefore, this change does not increase the probability of occurrence or the consequences of an accident previously evaluated in the FSAR; nor does it create a possibility of an accident of a type different from any already evaluated in the UFSAR.

Since this change does not affect the assumptions regarding equipment important to safety, there is no increase in the probability or consequences of a malfunction of equipment important to safety previously evaluated in the UFSAR. Similarly, it does not create the possibility of a malfunction of equipment important to safety different than previously evaluated in the UFSAR.

Since the change does not affect assumptions or the results contained in the UFSAR analyses, it does not reduce the margin of safety as defined in the basis for any technical specification.

SRASN: NPE-87-505

DOC NO: MNCR-86-0592

SYSTEM: Z51

DESCRIPTION OF CHANGE: The change in systems Z51/D17 (Control Room HVAC Systems/Process Radiation Monitoring System) for drawing M-0049 is the location of the supply line (1" HCC-56) being between Radiation Monitor SD17N016D and Radiation Monitor SD17N016C. It was also noted that the "engineering mark-up" showed the discharge line (1" HCC-57) from Z51 as N040A Chlorine Detector being routed upstream of the supply line. The correct change is to show the location of the line tying in downstream of SD17 Radiation Monitor (N016B). Also per this MNCR changes to the service description in Mechanical Standard MS-02 are required for the discharge line 1" HCC-57 and the supply line 1" HCC-56 to state its origination being from a 36" X 36" duct in lieu of the 18 inch diameter duct as stated now.

Additional changes required were identified during the review of the "engineering mark-up" of DCP 86/4017 for M-1108B. This mark-up showed the deletion of a line that was capped per a Change Notice to the Design Change Package, and therefore, will be shown on the P&ID. This MNCR covers the designation of a new line number in the Mechanical Standard MS-02 for this capped line.

The instrument location drawing, J-0502, were corrected to reflect the "as-built" elevation of the SD17 radiation monitors. The elevations shown on the existing drawing are within tolerances, and therefore, do not represent a non-conforming condition.

Changes were also identified to HVAC drawings, instrument installation detail drawing and small piping drawings to represent the "as-built" condition of the plant including the changes made by DCP 86/4017.

REASON FOR CHANGE: These drawing changes were made to reflect "as-built" conditions of the plant as evaluated for MNCR-86-0592.

SAFETY EVALUATION: There is no increase in the probability of occurrence or in the consequences of an accident or malfunction of equipment important to safety previously evaluated in the Safety Analysis Report. This MNCR documents the required drawing changes of the Z51/D17 systems to reflect the as-built condition of the plant. These drawing changes are software only and will not result in any operational or functional changes to the systems. The systems will function in their intended manner. Also, there is no creation of a possibility for an accident or malfunction of a different type than any evaluated previously in the Safety Analysis Report.

The drawing changes required by this MNCR will not result in any operational or functional changes to the Z51/D17 systems or affect the Technical Specifications of 3.3.7.8. Furthermore, the limiting conditions for operation applicability or surveillance requirements will not change. And therefore, the margin of safety as defined by the Technical Specifications is not reduced.

SRASN: NPE-87-309

DOC NO: DCP-84-0004

SYSTEM: P47

DESCRIPTION OF CHANGE: This change provides reach rods for valves NSP47F003A through F, which serve the Radial Well System.

REASON FOR CHANGE: This will eliminate the need for a diver to reach valves NSP47F003A through F, which is now required whenever caisson water levels are high.

SAFETY EVALUATION: This change will enhance the ease of access to the valves and therefore, does not increase the probability or consequences of an accident previously evaluated in the FSAR. The radial well has no safety function and no safety system is dependent upon it. Therefore, there is no increase in the probability or consequences of a malfunction of equipment important to safety. Also, there is no possibility of a malfunction of equipment important to safety different than previously evaluated in the FSAR. Since the reach rod installation meets all applicable design requirements and the Radial Well System will continue to function in its intended manner and no new failure modes are created, the possibility of a type different from any previously evaluated in the FSAR is not created. Since the Radial Well System has no safety function and is not addressed in Technical Specifications, there is no reduction in the margin of safety.

SRASN: NPE-87-313

DOC NO: DCP-87-3002

SYSTEM: G33

DESCRIPTION OF CHANGE: This DCP changes the divisional power supply for containment isolation valves Q1G33F252-A from Division I to Division II. The valve is renumbered Q1G33F252-B. The divisional power supply for valve Q1G33F253-B (outboard drywell isolation) is changed from Division II to Division I. This valve is renumbered Q1G33F253-A. An interlock is added between valves Q1G33F001-B and Q1G33F252-A.

REASON FOR CHANGE: Valve Q1G33F252-A is changed from Division I to Division II in order that no single event can interrupt motive power to both containment isolation valves, Q1G33F252-A and Q1G33F004-A. Valve Q1G33F253-B is changed from Division II to Division I to maintain redundancy for isolation of drywell penetration 366. The interlock between valves Q1G33F001-B and Q1G33F252-A is to prevent the inadvertent opening of one while the other is open; in this way, no single failure will cause both to simultaneously open.

SAFETY EVALUATION: This DCP resolves a condition in which a containment isolation valve did not conform to the FSAR requirements for electrical power separation. Redundancy is maintained for drywell isolation by this DCP. The interlock between valves Q1G33F001-B and Q1G33F252-A satisfies the requirements of 10CFR50.55a. Because of the above, the RWCU system operates as stated in the FSAR and therefore this DCP does not constitute an increase in the probability of occurrence of an accident previously evaluated in the FSAR.

Since the DCP does not affect the function of systems or components used in mitigating an accident, and since there are no changes in the "sequence of events" description in the UFSAR, there is no increase in the consequences of an accident previously evaluated in the UFSAR. Since no new loads are imposed and no changes are made in the original material or construction practices used to support, separate, or environmentally qualify equipment, there is no increase in the probability of a malfunction important to safety previously evaluated in the FSAR.

These changes will not cause the RWCU system to operate out of design specifications, do not affect the malfunction of any equipment, and do not impair the containment, drywell, and reactor coolant pressure boundary of the valves. Therefore, there is no increase in the consequences of a malfunction of equipment important to safety.

SRASN: NPE-87-313

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SAFETY EVALUATION: (Cont'd)

Because of this DCP, no single event can cause loss of motive power to both isolation valves. No new failure modes are introduced. Therefore, there is no possibility of an accident or malfunction of equipment different from any previously analyzed in the FSAR. Since this DCP does not affect the isolation capability of any valve, there is no reduction in the margin of safety as defined in the basis for any Technical Specification.

SRASN: NPE-87-322

DOC NO: DCP-87-0018

SYSTEM: F11

DESCRIPTION OF CHANGE: This change rotates the normal-up limit switches on the Refueling and Fuel Handling Platforms by 180°. Also, a section of handrail on the upper deck of the Fuel Handling Platform is removed.

REASON FOR CHANGE: The normal up limit switches are rotated in order to gain approximately 3 inches additional retraction in order to permit fuel clearance over the "Cattle Chute" and Horizontal Fuel Transfer System. In evaluating the possible effects of the additional retractions, the minimum pool level was conservatively assumed to be 7'-9" versus the 8'6" now assumed in the FSAR. The handrail section is removed in order to eliminate an interference with existing Fuel Handling Area Vent System (T42) ducts and supports south of the Spent Fuel Pool.

SAFETY EVALUATION: The probability of an accident is independent of the location of the normal-up limit switches and of the handrail. Therefore, there is no increase in the probability of an accident. The consequences of an accident are unchanged since a drop height of six feet is assumed in the accident analysis, and the drop height with the change is at 4 feet 6 inches. The handrail meets the same structural and OSHA requirements as the existing design; and should the modified normal-up limit switch fail, the redundant back-up switches will stop the upward travel of the fuel grapple as with the previous design. Therefore, there is no increase in the probability or consequences of a malfunction of equipment important to safety previously evaluated in the FSAR. Although the limit switch relocations produce a smaller (7'-9" versus 8'6") minimum water shield distance for the spent fuel pool and upper containment pool, the recalculated surface dose rate lies within the radiation zone "E" classification to which the pool is currently classified. In addition, the modified handrail will comply with the same structural and OSHA requirements as the existing design. Therefore, there is no possibility of an accident different from any previously evaluated in the FSAR. Since the relocated limit switch will maintain a redundant back-up switch and the modified handrail meets the same structural and OSHA requirements, there is no possibility of a malfunction of equipment different from that previously evaluated in the FSAR. Since none of the bases for Technical Specifications apply to the design or location of the Refueling or Fuel Handling Platform normal-up limit switches or the Fuel Handling Platform upper-deck handrails, there is no reduction in the margin of safety as defined in the basis for any Technical Specification.

SRASN: NPE-87-323

DOC NO: CN-87-0276

SYSTEM: C41

DESCRIPTION OF CHANGE: This change to the Standby Liquid Control system (SLCS) as a result of CN-87/276 installs a flow element (1C41FEN020), a flow indicator (1C41FIRO50), tubing and tubing supports to and from the flow element and indicator, a test loop with three pressure breakdown orifices, a pressure control valve, a globe valve, and piping and pipe supports for this test loop.

REASON FOR CHANGE: Implementation of these changes reduces personnel radiation exposure by decreasing time spent in containment by operators to conduct the SLCS pump flow surveillance procedure.

SAFETY EVALUATION: There is no increase in the probability of occurrence or in the consequences of an accident or malfunction of equipment important to safety previously evaluated in the Safety Analysis Report. The changes provided by this document enhance the testability of the SLCS, therefore, better ensuring the operability of the SLCS. The piping, tubing, and support modifications installed by this CN meet all applicable design codes. Therefore, the system will function in its intended manner. No new failure modes are created. Also, there is no creation of a possibility for an accident or malfunction of a different type than any evaluated previously in the Safety Analysis Report.

The changes described in this document enhance the SLCS pump flow testability by providing a direct indication of the SLCS pump test flow and will also provide better control when testing the SLCS for maintaining pressure. Therefore, this change will not reduce the margin of safety as defined in the basis for any technical specification.

SRASN: NPE-87-325

DOC NO: DCP-83-5004

SYSTEM: T27

DESCRIPTION OF CHANGE: This DCP provides a whip restraint to line 2" DBB-57.

REASON FOR CHANGE: To protect the tubing of E32 N051A, E, J, & N from terminal end breaks at valves E32 F006B and F008B, in order to classify this portion of the E32 system as a closed system outside containment.

SAFETY EVALUATION: Addition of this modification enables the tubing of E32 N051A, E, J, & N to be classified as a closed system outside the containment. The modification meets all applicable design codes. It does not affect the operation of any system, and provides required protection to the tubing. Therefore, there is no increase in the probability or consequences of an accident or malfunction of equipment important to safety. The system will function in its intended manner, and the operation of no system is affected by this change. Therefore, there is no possibility of an accident or malfunction of equipment different from previously evaluated in the FSAR.

Since whip restraint is not utilized in computing the basis of any Technical Specification, this change poses no reduction in the margin of safety.

SRASN: NPE-87-327

DOC NO: CN-87-0325

SYSTEM:

DESCRIPTION OF CHANGE: The change to the Standby Liquid Control System (SLCS) as a result of CN-87/325 changes the pipe class from ASME Class 2 to ASME Class 1 from the drywell penetration #328 to and including valve F217 and to and including valve F006 (to be renamed F007). It also deletes the 3/4" test line between the two check valves, modifies the Jet Impingment Support, and modifies other pipe supports.

REASON FOR CHANGE: The change from Class 2 to Class 1 piping was required by the NRC to meet the design criteria of the drywell. Modifications to the pipe supports were performed due to the increase in loads and were reviewed against the existing design loads.

SAFETY EVALUATION: There is no increase in the probability of occurrence or in the consequences of an accident or malfunction of equipment important to safety previously evaluated in the Safety Analysis Report. The changes provided by this document (CN) enhance the SLC System by upgrading the piping between check valve F007 and drywell penetration from Class 2 to Class 1. This piping upgrade ensures the operability of the SLCS. The piping and support modifications installed by this CN will meet all applicable design codes. Therefore, the system will function in its intended manner. Therefore, there is no creation of a possibility for an accident or malfunction of a different type than any evaluated previously in the Safety Analysis Report. Also, this change will not reduce the margin of safety as defined in the basis for any technical specification.

SRASN: NPE-87-328

DOC NO: CN-87-0344

SYSTEM: C41

DESCRIPTION OF CHANGE: The change to the Standby Liquid Control system (SLCS) piping outside the drywell as a result of CN-87/344 changes the pipe class from ASME Class 2 to ASME Class 1 from drywell penetration #328 to and including check valve F006 (Relocated back outside the drywell). It also adds pressure taps PPN402A & B, modifies pipe, pipe supports, and pipe anchors. This change also moved check valve F006 back outside the drywell.

REASON FOR CHANGE: The change from Class 2 to Class 1 piping was required by the NRC to meet the design criteria of the drywell. Modifications to the pipe supports were performed due to the increase in loads and were reviewed against their existing design loads.

SAFETY EVALUATION: There is no increase in the probability of occurrence or in the consequences of an accident or malfunction of equipment important to safety previously evaluated in the Safety Analysis Report. The changes provided by this document (CN) will enhance the SLC System by upgrading the piping between check valve F006 and drywell penetration #328 from Class 2 to Class 1, therefore, better ensuring the operability of the SLCS. The piping and support modifications installed by this CN will meet all applicable design codes. Therefore, the system will function in its intended manner. Therefore, there is no increase in the probability of occurrence or in the consequences of an accident or malfunction of equipment important to safety previously evaluated in the Safety Analysis Report. Also this change will not reduce the margin of safety as defined in the basis for any technical specification.

SRASN: NPE-87-330

DOC NO: CN-87-0323

SYSTEM: P64

DESCRIPTION OF CHANGE: CN 87-0323 provides the piping changes required to install a new basket strainer in the fire protection piping that supplies water to the post-accident sample filter train in the Turbine Building, Area 5, Elevation 93'-0".

REASON FOR CHANGE: This change provided for the necessary piping changes in order that the basket strainer could be installed.

SAFETY EVALUATION: There is no increase in the probability of occurrence or in the consequences of an accident or malfunction of equipment important to safety previously evaluated in the Safety Analysis Report. Fire Protection Evaluation 87/0027, Rev. 0 demonstrates the acceptability of the strainer assemblies, addressed in DMR 367-87, for use in deluge water spray systems utilizing 3/32 inch diameter nozzle orifices. The evaluated strainer assemblies meet design, construction and testing requirements specified by Underwriters Laboratories, Inc. and NFPA 15. The piping changes supplied by this CN meet all applicable design requirements and will function in its intended manner. The P64 system operation and function will not be affected by this CN. Failure of the P64 piping to the post accident sample filter train will not compromise any safety-related system or prevent safe shut-down.

There is no creation of a possibility for an accident or malfunction of a different type than any evaluated previously in the Safety Analysis Report. Fire Protection Evaluation 87/0027, Rev. 0 demonstrates the acceptability of the strainer assemblies, addressed in DMR 367-87, for use in deluge water spray system. The evaluated strainer assemblies meet design, construction and testing requirements specified by Underwriters Laboratories, Inc. and NFPA 15. The post accident sample filter train has no safety-related function (FSAR 9.4.7.3). The piping changes meet all applicable design requirements and will function in its intended manner. The P64 system operation and function will not be affected by this CN. No new failure modes are created. Proper installation of the fire protection piping ensures safe operation of the filter train. The piping and supports are designed to ANSI B31.1 located in the Turbine Building, Area 5 Elev. 93. Therefore, the possibility of a malfunction of equipment related to safety is not created.

The filter train and the fire protection piping of this CN serve no safety-related function and their failure will not prevent a safe shut-down, therefore, the margin of safety is not reduced. The modified piping does not change the limiting conditions for operation applicability of surveillance requirements. The piping supplied by this CN meet all applicable code requirements and will function in its intended manner. Therefore, this change will not affect the margin of safety.

SRASN: NPE-87-331

DOC NO: CN-87-0388

SYSTEM: R28

DESCRIPTION OF CHANGE: This Change Notice provided for Disconnect Switch 1Y77-03 to be utilized to power the Security Monitor and the Fire Alarm Printer.

REASON FOR CHANGE: This change was made to provide power from an uninterruptable source.

SAFETY EVALUATION: There is no increase in the probability of occurrence or in the consequences of an accident or malfunction of equipment important to safety previously evaluated in the Safety Analysis Report. This change has no effect on safety related systems. Where required, seismic supports have been provided to insure that raceways added will not create any Seismic II/I hazard. All added and reworked cable will be BOP and will be installed in accordance with the separation requirements of Reg. Guide 1.75.

There is no creation of a possibility for an accident or malfunction of a different type than any evaluated previously in the Safety Analysis Report. The implementation of this modification will not affect the environmental, seismic or operational requirements or specifications of any safety related system, therefore the accident possibilities are bounded by existing analysis. Where required, seismic supports for raceway are provided to insure no II/I seismic hazards are created. Added cable is BOP and will be installed to the separation requirements of Reg. Guide 1.75.

This power circuit is isolated from and does not affect any safety related system, nor does it degrade the operation of any equipment, system or structure. BOP raceways are installed with seismic supports where required and BOP cables are installed to the separation requirements of Reg. Guide 1.75. Therefore, the margin of safety is not reduced by the implementation of this design.

SRASN: NPE-87-335

DOC NO: CN-A30-42

SYSTEM: A30

DESCRIPTION OF CHANGE: CN A30-042 requested several doors to be deleted from the requirements of DCP 84/4502. The following doors were deleted from DCP 84/4502 in NPE's disposition of the change notice:

|       |       |       |       |       |
|-------|-------|-------|-------|-------|
| OC106 | OC112 | OC115 | OC117 | OC607 |
| OC110 | OC114 | OC116 | OC309 |       |

REASON FOR CHANGE: These doors are located in walls not requiring fire rating as justified by fire protection evaluations FPE 87/0023 and 87/0017, Rev. 1. According to the FHA and fire protection drawing A-0631, door OC616 is not fire rated. The fire dampers located in the derated walls are disabled in NPE's disposition of the change notice.

SAFETY EVALUATION: There is no increase in the probability of occurrence or in the consequences of an accident or malfunction of equipment important to safety previously evaluated in the Safety Analysis Report. These barriers are not required for compliance with GGNS Technical Specifications or Appendix R to 10CFR50. The requirements of Appendix A to BTP APCSB 9.5-1 for fire barriers will be satisfied. The evaluated barriers do not separate safety related fire areas or safe shutdown components. The evaluated barriers are not required to isolate safety related systems from unacceptable fire hazards. The deletion of the fire barrier requirements will not affect control room habitability or the control room envelope. These fire protection evaluations provide the basis for the disposition of CN A30-042. Therefore, there is no creation of a possibility for an accident or malfunction of a different type than any evaluated previously in the Safety Analysis Report.

There is no reduction in the margin of safety as defined in the basis for any Technical Specification. The margin of safety as defined for any technical specification remains unchanged. Technical Specification 3/4.7.7 addresses fire rated assemblies which separate safety related fire areas or portions of redundant systems important to safe shutdown. These barriers do not separate safety related fire areas or safe shutdown system components. Therefore, these barriers are not required to be fire rated to meet the requirements of Technical Specification 3/4.7.7.

SRASN: NPE-87-347

DOC NO: NPEFSAR-87-0079

SYSTEM: P41

DESCRIPTION OF CHANGE: This safety evaluation justifies a change to UFSAR subsection 9.2.1.2. UFSAR subsection 9.2.1.2 states that "redundant automatic isolation valves" are provided to separate all nonessential "cooling water" systems from the SSW system. Since not all of the nonessential systems are separated from the SSW system by redundant automatic isolation valves, subsection 9.2.1.2 requires revision to indicate that "suitable isolation capability" has been provided at these SSW/nonessential system interfaces to assure that the SSW system safety function can be accomplished assuming a single failure. Use of "suitable isolation capability" is consistent with the guidance in 10 CFR 50, Appendix A, GDC 44.

REASON FOR CHANGE: Since not all the nonessential systems are separated from the SSW system by means of redundant isolation valves, this change is necessary to reflect the fact that the remaining nonessential systems have suitable isolation capability from the SSW system. This change provides an acceptable alternate means of complying with the requirements of 10CFR50, Appendix A, GDC 44.

SAFETY EVALUATION: Use of isolation provisions other than redundant isolation valves is acceptable, as noted in 10 CFR 50, Appendix A, General Design Criterion 44. All existing isolation provisions are capable of supporting the SSW safety function.

These clarifications to the UFSAR do not change the applicable SSW system or UHS design, material, or construction standards; do not bypass the SSW system or UHS design features; do not degrade overall SSW system or UHS reliability; do not cause the SSW system or UHS to operate outside design limits; and do not decrease the SSW system or UHS integrity.

Therefore, the proposed UFSAR change does not increase the probability of an accident previously evaluated in the UFSAR.

A review of the various nonessential interfaces, performed to assure that "suitable isolation capability" exists to isolate the SSW system from these nonessential systems, identified that all existing isolation provisions are capable of supporting the system safety function assuming a single active failure.

Since review results assure the operability of the SSW system and demonstrate that all existing isolation provisions are capable of supporting the system safety function assuming a single active failure, the consequences of any accidents previously evaluated in the UFSAR will not be increased.

SRASN: NPE-87-347

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## SAFETY EVALUATION: (Cont'd)

The SSW system and UHS operational reliability per the original design as described in the UFSAR has not changed. The proposed UFSAR changes reflect system capabilities assuming a single active failure of the isolation provisions between the SSW system and nonessential systems. The proposed changes do not change the SSW system or UHS protection features; do not downgrade SSW or UHS supported systems; do not reduce SSW system or UHS redundancy or independence; do not cause the SSW system or UHS to operate outside design limits; or decrease the SSW system or UHS integrity.

Therefore, these changes do not increase the probability of a malfunction of equipment important to safety previously evaluated in the UFSAR.

The proposed UFSAR change clarifies that the isolation capabilities between the SSW system and nonessential systems may possibly not consist of automatic redundant isolation valves. Use of isolation provisions other than redundant automatic valves is acceptable, as noted in 10 CFR 50 Appendix A, General Design Criterion (GDC) 44, provided the isolation provisions are capable of supporting the system safety function assuming a single active failure.

As stated above, a review of the various nonessential interfaces identified that all existing isolation provisions are capable of supporting the system safety function assuming a single active failure.

Since review results assure the operability of the SSW system and demonstrate that all existing isolation provisions are capable of supporting the system safety function assuming a single active failure, the consequences of a malfunction of equipment important to safety previously evaluated in the UFSAR will not be increased.

A review of the various nonessential interfaces identified that all existing isolation provisions are capable of supporting the system safety function assuming a single active failure. Establishment of administrative controls provides "suitable isolation capability" for the SSW/PSW interface at the division I and II control room air conditioning units, and for the interface at the division I and II SSW blowdown to the discharge basin.

The review results and proposed UFSAR changes assures that the assumptions made in the UFSAR regarding the operation of the SSW system and UHS following a single active failure are consistent with the system design. Since the SSW system and UHS response to accidents described in the UFSAR remain unchanged, no failure modes outside those described in the UFSAR will be created.

SRASN: NPE-87-347

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SAFETY EVALUATION: (Cont'd)

The basis of Technical Specifications 3/4.7.1.1, 3/4.7.1.2, and 3/4.7.1.3 assumes that the operability of the SSW system and UHS ensures that sufficient cooling capability be available for continued operation of safety related equipment during normal and accident conditions, even with a single failure in one of the redundant SSW trains. The UFSAR changes do not affect this basis but instead reaffirm the as designed operational functionality of the SSW system and UHS.

SRASN: NPE-87-350

DOC NO: E-G1032-7

SYSTEM: P61

DESCRIPTION OF CHANGE: This change provides isolation between Class 1E power distribution panel 15P61 and remote shutdown panel room heat pump N1Z77B003-A. Isolation is achieved with redundant Class 1E overcurrent protection devices (breaker and fuse).

REASON FOR CHANGE: To provide overcurrent protection to power distribution panel 15P61 through the use of a breaker and a fuse.

SAFETY EVALUATION: The possibility of an accident as a result of a loss of a Class 1E power panel remains bounded by the existing analysis in the FSAR. Therefore, there is no increase in the probability or consequences of an accident previously evaluated in the FSAR. Since the breaker and the fuse will interrupt the non-Class 1E circuit before the Class 1E power panel breaker operates, there is no increase in the probability of malfunction of equipment important to safety. Since the non-Class 1E load fed from the 15P61 panel has no safety function or effect on equipment important to safety, failure of the 15P61 panel in this regard does not increase the consequences of a malfunction of equipment important to safety.

Since the existing analysis for failure of the equipment bounds that for the utilization of a time overcurrent fuse as a redundant circuit interrupting device, there is no possibility of an accident or malfunction of equipment important to safety not previously evaluated in the FSAR. Since this change has no impact on equipment important to safety, there is no reduction in any margin of safety.

SRASN: NPE-87-351

DOC NO: MNCR-899-86

SYSTEM:

DESCRIPTION OF CHANGE: MNCR 899-86 addressed low SSW flows to the following units served by the A Loop of the SSW with the basin water level maintained at elevation 100'-0": Control Room HVAC unit, ESF Switchgear Room Cooler 139E, ESF Switchgear Room Cooler 119W, RCIC Room Cooler and RHR pump "A" seal cooler. In an engineering analysis it was found that all of the above units are capable of performing their safety functions. FSAR Table 9.4-7 will be revised.

REASON FOR CHANGE: This MNCR documents that the minimum SSW flow rates to the subject areas are enveloped within acceptable safety limits. Calculations are listed in the safety evaluation to support this conclusion.

SAFETY EVALUATION: These changes are reductions in minimum post accident design flows and have no bearing on FSAR evaluated accident precursors. Therefore, the probability of an accident previously evaluated in the FSAR is not increased. There are no physical changes to the facility, only reductions in minimum post accident design flows to account for more detailed heat load and cooler capacity assessments. The post accident temperatures in the control room do not exceed the limits of NUREG 0700, and the other post accident room temperatures are unaffected. Therefore, there is no increase in the consequences of an accident. For these reasons, there is no increase in the probability or consequences of a malfunction of equipment important to safety.

There is no adverse impact on the 30-day ultimate heat sink, or any physical effect on the plant. Therefore, there is no possibility of an accident or malfunction of equipment important to safety not previously evaluated in the FSAR. These changes have no impact on normal temperatures. These changes do not result in Post-Accident temperatures exceeding the limits of NUREG 0700 in the Control Room. The other Post-Accident room temperatures remain unaffected by the change. Therefore, these changes will not reduce the margin of safety as defined in the basis for any technical specification.

SRASN: PLS-87-006

DOC NO: Installation of  
Temporary Air Conditioning  
Units in Unit One Control  
Room

SYSTEM: Z17

DESCRIPTION OF CHANGE: This evaluation of the installation of temporary air conditioning units is to resolve concerns over the design adequacy of three temporary air conditioning units in Room OC403, as well as the integrity of their water supply.

REASON FOR CHANGE: To resolve concerns over Seismic II/I concerns and the effect of water line supply ruptures.

SAFETY EVALUATION: The water supply lines used are 3/4 inch. Since small pipe breaks (less than 1") are not postulated events, therefore, there is no increase in the probability of an accident.

A walkdown of the building revealed that there are no Seismic II/I concerns associated with the piping. If the two inch line to the Unit 2 Control Room were to leak, Unit 1 equipment would be unaffected. The Unit 1 control room floor penetration seals would not leak during the period of time required for operator action to isolate the 2" Unit 2 line. Therefore, there is no increase in the consequences of an accident or of a malfunction of equipment important to safety. Nor is there an increase in the probability of occurrence of a malfunction of equipment important to safety.

Since there are no Seismic II/I concerns associated with the small piping, and no leakage into the Unit 1 Control Room associated with the larger piping, there is no possibility of an accident or malfunction of equipment important to safety different from any previously evaluated.

These air conditioner units are not addressed in Technical Specifications. Their failure will have no effect on any safety related equipment. Therefore, they do not need to be addressed in Technical Specifications and there is no reduction in the margin of safety as defined in the basis for any Technical Specification.

SRASN: PLS-87-029

DOC NO: FSAR-CR-87-006

SYSTEM:

DESCRIPTION OF CHANGE: This FSAR change request revises the description of the recharging capability for the Control Room portable self-contained air breathing units.

REASON FOR CHANGE: To update the FSAR to reflect actual conditions.

SAFETY EVALUATION: The new recharging system has the same minimum recharging capability and the same minimum six-hour bottled air capacity as the old system. Therefore, there is no increase in the probability or consequences of an accident or malfunction of equipment important to safety previously analyzed in the FSAR. Similarly, there is no possibility of a different type of accident or malfunction from any previously evaluated in the FSAR. Since the recharging system is not addressed in technical specifications, there is no reduction in the margin of safety as defined in the basis for any technical specifications.

SRASN: PLS-87-031

DOC NO: 01-S-02-3

SYSTEM:

DESCRIPTION OF CHANGE: In accordance with SERI's commitment, OQAM policy 6 paragraph 6.5.10; plant procedures (as defined in Technical Specification 6.8.1) shall be reviewed by an individual knowledgeable in the area affected no less frequently than every two years to determine if changes are necessary or desirable. A revision of the procedure constitutes a procedure review.

The above commitment was arrived from the requirements in ANSI N18.7-1976/ANS-3.2, "Administrative Controls and Quality Assurance for the Operational Phase of Nuclear Power Plants", which is endorsed by Regulatory Guide 1.33.

ANS-3.2 - 1982 provides better defined guidelines for complying with the 2 year review requirement. Specifically it states:

Plant procedures shall be reviewed by an individual knowledgeable in the area affected by the procedure no less frequently than every two years to determine if changes are necessary or desirable. This requirement for routine followup review can be accomplished in several ways, including (but not necessarily limited to): documented step-by-step use of the procedure (such as occurs when the procedure has a step-by-step checkoff associated with it), or detailed scrutiny of the procedure as part of a documented training program, drill, simulator exercise, or other such activity. A revision of a procedure constitutes a procedure review.

Use of the above guidelines in SERI's program was discussed between members of Plant Staff, Quality Assurance, and the NRC. It was explained in this discussion that SERI was not committing to ANS-3.2 - 1982, but would provide additional clarification to SERI's commitment to ANSI 18.7-1976/ANS-3.2 during the next normal revision of the Operational Quality Assurance Manual (OQAM). The NRC advised this could be accomplished via the 10CFR50.59 program as long as no unreviewed safety question was identified.

REASON FOR CHANGE: This safety evaluation was written to clarify the requirements for performing 2 year reviews for plant procedures.

SAFETY EVALUATION: There is no increase in the probability of occurrence or in the consequences of an accident or malfunction of equipment important to safety previously evaluated in the Safety Analysis Report. This change is only administrative in nature and only affects the methods of performing a two year review. No accident bases are affected by this change. Plant procedures will continue to be developed in accordance with Author's Guide requirements and reviewed in accordance with Technical Specifications.

SRASN: PLS-87-031

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## SAFETY EVALUATION: (Cont'd)

The procedures defined in Technical Specification 6.8.1 shall continue to be reviewed at a minimum of every two years as committed. However, the alternate methods for accomplishing this review consist of documented step-by-step use of the procedure; or detailed scrutiny of the procedure as part of a documented training program, drill, simulator exercise, or other such activity; or routine followup review or revision of the procedure. Therefore, there is no creation of a possibility for an accident or malfunction of a different type than any evaluated previously in the Safety Analysis Report. This is an OQAM program change and has no affect on any Technical Specification safety margin requirements.

SRASN: PLS-87-033

DOC NO: IPC-87-3122

SYSTEM: C83

DESCRIPTION OF CHANGE: This change installs three security watch towers.

REASON FOR CHANGE: To reduce the number of personnel required for compensatory postings.

SAFETY EVALUATION: The requirements of the security plan will continue to be met through the use of these towers. No safety equipment is affected. Therefore, there is no increase in the probability or consequences of a malfunction of equipment important to safety or of an accident. No new variables are introduced into plant operation by this change; therefore, there is no increase in the probability of an accident or malfunction of equipment different from any previously evaluated. Since the requirements of the security plan will continue to be met, there is no reduction in the margin of safety as defined in the basis for any Technical Specification.

SRASN: PLS-87-036

DOC NO: TSTI-1B33-87-001-0-S

SYSTEM: B33

DESCRIPTION OF CHANGE: This Technical Special Test Instruction requires operating the recirculation pump motors uncoupled from the pumps while the plant is shutdown.

REASON FOR CHANGE: This test is to obtain motor vibration data.

SAFETY EVALUATION: There is no increase in the probability of occurrence or in the consequences of an accident or malfunction of equipment important to safety previously evaluated in the Safety Analysis Report. The recirculation loop for the recirculation motor under test will be out of service with the pump and motor uncoupled. This test introduces no new potential for draining the reactor vessel nor any other condition detrimental to plant safety. Breaker protection is retained for this test. No new condition that could degrade the level of safety is introduced by performing this test.

There is no creation of a possibility for an accident or malfunction of a different type than any evaluated previously in the Safety Analysis Report. Local closing of the breaker for the motor under test will have no effect on the safety function of the breaker. Local breaker operation will not affect the protective circuitry. The equipment was operated within its designed parameters with full protection intact.

No margin of safety as defined in the basis for any technical specification is reduced since operation of the recirculation motors during this test have no effect on recirculation hydraulics and since the plant is in a shutdown condition during this test.

SRASN: PLS-87-037

DOC NO: TSTI-1E51-87-001-0-S

SYSTEM: E51

DESCRIPTION OF CHANGE: TSTI 1E51-87-001-0-S provides the direction to obtain baseline data related to the thrust required to overcome discrete differential pressures for select 1E51 valves. This instruction also provides the direction (system line-ups) to obtain the discrete test pressures/differential pressures.

REASON FOR CHANGE: The reason for the test was to evaluate the subject E51 valves in accordance with the requirements of IEB 85-03.

SAFETY EVALUATION: There is no increase in the probability of occurrence or in the consequences of an accident or malfunction of equipment important to safety previously evaluated in the Safety Analysis Report. System functional operation of the RCIC system during performance of this TSTI is consistent with that of the quarterly surveillance and testing performed under the startup program by 1E51-SU-14-2. System piping should see no greater pressures than those expected during normal system operation or to that for which the system was designed. The RCIC system will be rendered inoperable, however, the HPCS system will remain operable and thus provide the means for high pressure RPV coolant makeup should the need arise.

RCIC will be considered inoperable during performance of this TSTI, however, HPCS will remain operable. Since either HPCS or RCIC are relied upon to mitigate the consequences of accidents evaluated in Chapter 15 of the FSAR, this margin is not reduced under these conditions. Performance of this TSTI does not impose loading on RCIC equipment to which it is not designed for. The purpose of this TSTI is merely to obtain baseline data on RCIC valves under conditions simulating the specifications to which they were originally designed.

There is no creation of a possibility for an accident or malfunction of a different type than any evaluated previously in the Safety Analysis Report. During performance of this TSTI the RCIC system will be operated using the normal motive force (Reactor Steam) over the full range of steam pressures and under conditions, which by the design are allowed. By so doing no new loads, pressures, or forces are applied to the system outside those to which the system has been designed. By remaining within the constraints imposed by the LCO's and their appropriate action statements the margin of safety is not compromised for any GGNS Technical Specification.

SRASN: PLS-87-038

DOC NO: TSTI-1E22-87-001-0-S

SYSTEM: E22

DESCRIPTION OF CHANGE: TSTI 1E22-87-001-0-S provides the direction to obtain baseline data related to the thrust required to overcome discrete differential pressures for select 1E22 valves. This instruction also provides the direction (system line-ups) to obtain the discrete test pressures/differential pressures.

REASON FOR CHANGE: The reason for the test was to evaluate the subject E22 valves in accordance with the requirements of IEB 85-03.

SAFETY EVALUATION: There is no increase in the probability of occurrence or in the consequences of an accident or malfunction of equipment important to safety previously evaluated in the Safety Analysis Report. Performance of this TSTI does not degrade the integrity of the HPCS system in any way. Performance of this TSTI merely tests the ability of the HPCS system and its valve components to perform at its lowest of the reactor vessel pressure to which it was designed to operate. These actions in and of themselves do not constitute entry into any accident condition described in Chapter 15 of the FSAR.

During performance of this TSTI the HPCS system will be rendered inoperable under the provisions of GGNS Technical Specification 3/4.5.2. As such, sufficient ECCS availability is ensured to mitigate the consequences of accidents evaluated in Chapter 15 of the FSAR. Since testing of the HPCS system is to be performed at zero psig reactor pressure and due to the nature of the events/accidents described in Chapter 15 of the FSAR the consequences of an accident are not greater than previously described in the FSAR.

Performance of this TSTI will not alter the manner in which the HPCS system performs/operates with the exception of defeating the reactor vessel high water level trip, the consequences of which have been discussed. The system will be operated in the manner in which it is designed to operate and as such no accident of a different type than that already analyzed in the FSAR can be foreseen as a result of this TSTI.

Performance of this TSTI does not permanently alter any HPCS system equipment nor does it impose loading on HPCS equipment to which it is not designed. The purpose of this TSTI is merely to obtain baseline data on HPCS valves under conditions simulating the specifications to which they were originally designed. By remaining within these bounds the probability of occurrence of a malfunction of HPCS equipment, or interfacing system equipment, important to safety is no greater than that previously evaluated in the FSAR.

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## SAFETY EVALUATION: (Cont'd)

There is no creation of a possibility for an accident or malfunction of a different type than any evaluated previously in the Safety Analysis Report. During performance of this TSTI the HPCS system will be operated under conditions which by the design are allowed (with the exception of defeating the reactor vessel high water level interlock). No unanalyzed loads, pressures or forces are applied to the system components outside those to which the system is designed. Based on this the consequences of a malfunction of equipment important to safety as previously evaluated in the FSAR are not increased.

As previously stated, HPCS and interfacing equipment important to safety will not be subjected to any forces, pressures or conditions to which it is not designed or that are not expected to occur in it's design life. Malfunctions of this equipment are not foreseen and therefore this then precludes malfunctions of a different type than previously evaluated in the FSAR.

By remaining within the constraints imposed by the LCO's and their appropriate action statements the margin of safety is not compromised for any GGNS Technical Specification.

SRASN: PLS-87-040

DOC NO: 04-1-01-P41-1-Temp1

SYSTEM: P41

DESCRIPTION OF CHANGE: This procedure provides instructions for chemical cleaning of SSW loops A and C during RF02.

REASON FOR CHANGE: To enable SSW loops A and C to be chemically cleaned.

SAFETY EVALUATION: Design flow criteria were observed to be met after this procedure was implemented. Fouling on the interior pipe walls was removed without degradation of the base metal. Onsite testing verified the success of this process in removing fouling present in the SSW system. Corrosion coupon data collected during the testing verified that the corrosion rates experienced during the cleaning were insignificant in regards to the structural adequacy or pressure retaining capability of the piping. Additionally, in response to concerns of the potential degradation of weld materials and crevice regions NPE has concluded that preferential accelerated corrosion in those areas during chemical cleaning would not occur.

Corrosion rate information submitted by Nalco (December 21, 1987) also concluded that in both laboratory experiments as well as actual cleaning projects, base metal losses were not a problem. This acceptable corrosion rate information coupled with the fact that system performance was improved by this process verify that the cleaning did not increase the probability or consequences of occurrence of accidents evaluated in the FSAR.

Implementation of this procedure improves system performance. Nor is there a possibility of an accident or malfunction of equipment different from previously evaluated. Therefore, there is no reduction in the margin of safety as defined in the basis for any Technical Specification.

SRASN: NSP-87-005

DOC NO: Refueling Operations (RF02)  
in Modes 4, 5, and \*

SYSTEM:

DESCRIPTION OF CHANGE: During the second refueling outage (RF02) at GGNS-1, SERI replaced 288 GE 8X8 irradiated fuel assemblies with 288 new unirradiated ANF XN-1.2 8X8 fuel assemblies. The reload assemblies are functionally and mechanically equivalent to the irradiated fuel although they do possess slightly higher enrichments and gadolima loadings. The ANF XN-1.2 reload assemblies were designed and built by ANF specifically for the GGNS-1 cycle 3 reload core.

REASON FOR CHANGE: This change was necessary for refueling the GGNS-1 reactor for the next operating cycle.

SAFETY EVALUATION: There is no increase in the probability of occurrence or in the consequences of an accident or malfunction of equipment important to safety previously evaluated in the Safety Analysis Report. Each of the accidents evaluated in GGNS-1 FSAR in Chapter 15 was reviewed to determine if the implementation or performance of actions would increase the probability of occurrence of any of these accidents. The result of the review is the conclusion that the probability of occurrence of these previously evaluated accidents is not increased. In general, this review finding is supported by the functional and mechanical equivalence of the GE 8X8 fuel and the ANF 8X8 fuel, as documented in NEDE-21826, 21827 and 21828.

Additional accidents are not possible because the operational condition assumed in the FSAR evaluation was not allowed, i.e. activities restricted to certain modes of operation, or the actions had no effect on the precursors for the accidents as described in the FSAR.

Refueling Operations in Modes 4, 5, and \* will have no effect on the precursors for accidents described in the FSAR, therefore, the probability of occurrence of these accidents is not increased. Also, since the fuel is unirradiated and possesses no fission product inventory the consequences of an accident described in the FSAR are not increased. The finding of no increased consequences is further supported by the functional and mechanical equivalence of the GE 8X8 fuel and the ANFC 8X8 fuel as documented in the referenced NEDE documents.

There is no creation of a possibility for an accident or malfunction of a different type than any evaluated previously in the Safety Analysis Report. The reload fuel is specifically designed to be accommodated by all GGNS-1 fuel handling equipment, the storage pools and the core. All refueling activities were carried out according to approved GGNS-1

SRASN: NSP-87-005  
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SAFETY EVALUATION: (Cont'd)

Technical Specifications. A review of the approved Technical Specifications and their bases show that the minor changes in fuel enrichment and gadolina concentrations in the ANF 8X8 fuel design have no impact on system operability or procedural controls as described in the Technical Specifications or their bases.

SRASN: NSP-87-006

DOC NO: NPD Policy Manual

SYSTEM:

DESCRIPTION OF CHANGE: The NPD Policy Manual was cancelled since it has been superseded by the SERI Operating Manual. Corporate Services rather than Nuclear Support will be responsible for the new Operating Manual.

REASON FOR CHANGE: These changes have resulted from the reorganization from MP&L to SERI.

SAFETY EVALUATION: This manual change and administrative control change does not increase the probability of occurrence or in the consequences of an accident or malfunction of equipment important to safety previously evaluated in the Safety Analysis Report. These changes do not create a possibility for an accident or malfunction of a different type than any evaluated previously in the Safety Analysis Report. These changes do not reduce the margin of safety as defined in the basis for any technical specifications.

SRASN: NLS-87-007

DOC NO: FSAR-CR-NLS-87-057

SYSTEM:

DESCRIPTION OF CHANGE: This change to UFSAR was the addition of the reference to the MP&L/SERI Switchyard Agreement. MP&L retained ownership of the switchyard. However, SERI operates the switchyard.

REASON FOR CHANGE: This added reference was to ensure continued compliance with General Design Criteria 17.

SAFETY EVALUATION: There is no increase in the probability of occurrence or in the consequences of an accident or malfunction of equipment important to safety previously evaluated in the Safety Analysis Report. There are no changes in the design, maintenance or operation of the existing facility. The consequences of a malfunction of equipment important to safety is not increased due to the FSAR reference to or due to the content of the Switchyard Agreement because the FSAR assumes loss of all grid connections. GGNS is designed for loss of offsite power. Therefore, neither the FSAR reference to or the content of the Switchyard Agreement will create the possibility of a malfunction of equipment important to safety different than previously identified.

There are no changes to plant design, operation or maintenance and there are no changes to Technical Specifications. Since Tech. Specs. impact the plant design basis and safety analysis, it is concluded this change does not affect any plant margin of safety.

SRASN: NLS-87-009

DOC NO: UFSAR Appendix 13A

SYSTEM:

DESCRIPTION OF CHANGE: This change reflects updates to the resumes of key personnel associated with the operation of GGNS.

REASON FOR CHANGE: To ensure that the resumes contained in Appendix 13A are accurate and up to date.

SAFETY EVALUATION: Individuals assigned to new positions are required to meet the qualification requirements specified in the FSAR. Analyses in the FSAR which assume operator error remain unchanged based on these individuals meeting the FSAR requirements. No system functions or designs are changed. Therefore, there is no increase in the probability or consequences of an accident or of a malfunction of equipment important to safety as previously analyzed in the FSAR. Similarly, there is no increase in the probability of an accident or of a malfunction of equipment of a different type from any previously analyzed in the FSAR. Since individuals assigned to new positions are required to meet the qualification requirements specified in Technical Specifications, there is no reduction in the margin of safety as defined in the basis for any technical specification.

SRASN: NLS-87-010

DOC NO: FCR-NLS-87-075

SYSTEM: G33

DESCRIPTION OF CHANGE: This document added a summary description of the pre-pump and post-pump modes of Reactor Water Cleanup (RWCU) System operation to UFSAR Subsection 5.4.8.2. This addition has no effect on plant operations. The applicable system numbers are G33 and G36.

REASON FOR CHANGE: This addition to the UFSAR was made to give more detail to this subject as recommended by the NRC.

SAFETY EVALUATION: There is no increase in the probability of occurrence or in the consequences of an accident or malfunction of equipment important to safety previously evaluated in the Safety Analysis Report. This change to UFSAR Subsection 5.4.8.2 only provides a description of the modes of RWCU System operation and does not alter the analysis of any accidents previously evaluated in the FSAR nor alter the assumed equipment malfunctions in the UFSAR analysis.

The modes of RWCU operation being described in the UFSAR change have already been taken into account into the accidents evaluated in the UFSAR; therefore, the possibility of a different type of accident being created does not exist. This change does not involve any installation or modification of equipment. Malfunctions assumed in the UFSAR analyses and the results of those analyses remain unaltered by the proposed change.

The analyses and results contained in the UFSAR are not changed by the proposed addition to Subsection 5.4.8.2. This change does not affect the bases for any technical specification.

SRASN: NLS-87-011

DOC NO: CR-NLS-87-067

SYSTEM:

DESCRIPTION OF CHANGE: This Change Request reflects in the UFSAR the title changes, personnel changes, organizational changes and changes in responsibilities for certain positions in SERI.

REASON FOR CHANGE: These UFSAR changes are made to accurately reflect the SERI organizational changes made since the previous update.

SAFETY EVALUATION: There is no increase in the probability of occurrence or in the consequences of an accident or malfunction of equipment important to safety previously evaluated in the Safety Analysis Report. Certain changes were made to reflect the change from MP&L to SERI (corporate non-nuclear positions). The other changes are intended to: more equally distribute the workload, strengthen management and administrative functions, and provide a more effective management chain of command. Individuals assigned to the newly created positions are required to meet the qualifications specified in the FSAR. Therefore, there is no creation of a possibility for an accident or malfunction of a different type than any evaluated previously in the Safety Analysis Report.

These changes have no impact on the margin of safety due to their administrative nature. Plant and offsite organization is strengthened and qualification requirements for newly created positions are retained.

SRASN: NLS-87-012

DOC NO: CR-NLS-87-003

SYSTEM:

DESCRIPTION OF CHANGE: This FSAR change request provides a listing of plant ESF systems which is based on information provided in the Standard Review Plan Chapter 7.3, "Engineered Safety Features Systems" and in General Electric Specification 22A8400, Table 3-3 "Regulatory Classification of Systems (Regulatory Guide 1.70)." The inclusion of this ESF systems list is needed to meet a commitment made to the NRC in AECM-86/0391, "Response to Notice of Violation 86-32-15."

Also, changes to FSAR sections 1.2.2.4, 6.0, 7.3.1, 8.1.3, and 9.2.1 are being made to eliminate discrepancies and provide clarification.

REASON FOR CHANGE: This change was made to ensure that the system descriptions found in these FSAR sections accurately reflect the proper system classification, whether it be an ESF system or an essential auxiliary system.

SAFETY EVALUATION: There is no increase in the probability of occurrence or in the consequences of an accident or malfunction of equipment important to safety previously evaluated in the Safety Analysis Report.

This change request has been reviewed and has been determined to have no affect on the operation or design of the systems addressed in the FSAR sections. Also, there is no impact on any FSAR accident analysis in which the systems addressed in the change request are called upon to function.

Therefore, there is no creation of a possibility for an accident or malfunction of a different type than any evaluated previously in the Safety Analysis Report. Also, there is no reduction in the margin of safety as defined in the basis for any technical specification.

SRASN: NLS-87-013

DOC NO: NLS-87-065

SYSTEM:

DESCRIPTION OF CHANGE: This FSAR change updates the System Maps for Mississippi Power & Light and Middle South Utilities.

REASON FOR CHANGE: This FSAR change was made to reflect the latest system grid revisions.

SAFETY EVALUATION: There is no increase in the probability of occurrence or in the consequences of an accident or malfunction of equipment important to safety previously evaluated in the Safety Analysis Report. The offsite power supply to GGNS remains unchanged. The FSAR has analyzed loss of all grid connections as an incident of moderate frequency. No system designs or functions are being changed. Therefore, there is no reduction in the margin of safety as defined in the basis for any technical specification. Also, there is no creation of a possibility for an accident or malfunction of a different type than any evaluated previously in the Safety Analysis Report.

SRASN: NLS-87-014

DOC NO: FCR-NLS-87-074

SYSTEM:

DESCRIPTION OF CHANGE: The changes to the UFSAR in Subsection 9.5.2 reflect a change in 1) owner of the telephone system for normal plant communications, 2) plant to offsite radio communications, and paging capabilities from MP&L to SERI, and 3) the two-way radio system.

REASON FOR CHANGE: This change to the UFSAR reflects the change of ownership of the telephone system for normal plant communications, and plant to offsite radio communications. The two-way radio system was upgraded to a digital voice protected system for privacy.

SAFETY EVALUATION: There is no increase in the probability of occurrence or in the consequences of an accident or malfunction of equipment important to safety previously evaluated in the Safety Analysis Report. The changes reflected in the UFSAR change request do not 1) represent a reduction in the reliability, redundancy, or maintenance requirements of the communications system and 2) reflect a change in communications devices available at work stations throughout the plant. The UFSAR indicates that only sound-powered telephones can be considered completely functional under emergency conditions. The changes to the UFSAR do not affect the sound-powered telephones. In addition, the dedicated telephone lines discussed in the Emergency Plan were not affected by these changes. Failure of a communications system will not compromise any safety-related system or component. Therefore, there is no creation of a possibility for an accident or malfunction of a different type than any evaluated previously in the Safety Analysis Report. Also, there is no reduction in the margin of safety as defined in the basis for any Technical Specification.

SRASN: NLS-87-015

DOC NO: FCN-3785

SYSTEM:

DESCRIPTION OF CHANGE: Subsection 7.5 of the FSAR was revised to incorporate the GGNS Reg. Guide 1.97 position which has been approved by the NRC per the SER dated January 12, 1987. There are certain changes which are made to the new FSAR Table 7.5-2 which resulted from the process of incorporating the GGNS Reg. Guide 1.97 position report. These changes are as follows:

- 1) Revise the methods for control room display for primary containment area radiation and MSIV-LCS pressure variables.

The revised methods for control room display are consistent with Reg. Guide 1.97, Rev. 2 which indicates that Category 1 variables should be displayed on either a direct-indicating or recording device and Category 2 variables may be displayed by stripchart recorder indication.

- 2) Revise the ranges for the post accident sampling variables.

Ranges for the post-accident sampling variables are revised for consistency with Reg. Guide 1.97 requirements. This will allow flexibility for future procurement of post-accident sampling instruments.

- 3) Revise the flow rates for the normal and accident monitor stack flow instruments.

The revised flow rates for the normal and accident monitor stack flow instruments are within 0-110% of design flow as required by Reg. Guide 1.97 except for the Offgas and Radwaste Building vents. The flow monitors for the Offgas and Radwaste Building have a range of 0 to 52,800 CFM. The normal flow for the Radwaste Building discharge vent is 52,495 CFM plus offgas discharge flow which has a normal flow of equal to or less than 25 CFM. Therefore, the GGNS flow monitor for the Radwaste and Offgas System does not meet the specified 110% range of Reg. Guide 1.97.

The other changes to the FSAR based on incorporating the GGNS Reg. Guide 1.97 position are consistent with the requirements of Reg. Guide 1.97, Rev. 2.

REASON FOR CHANGE: This FSAR revision was made to incorporate the GGNS Reg. Guide 1.97 position which was approved by the NRC per the SER dated January 12, 1987.

SAFETY EVALUATION: There is no increase in the probability of occurrence or in the consequences of an accident or malfunction of equipment important to safety previously evaluated in the Safety Analysis Report. The subject instrumentation is used for post accident monitoring. The information corrected or revised

SRASN: NLS-87-015

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## SAFETY EVALUATION: (Cont'd)

does not affect the operation of any plant equipment. The information corrected or revised does not reflect a change to the plant design or equipment for responding to an accident. The subject instrumentation for use during an accident is still consistent with the requirements of R.G. 1.97 (except Offgas and Radwaste Building effluent monitor flow rate) and does not change SERI compliance to R.G. 1.97. The subject changes to the FSAR do not change operator response to accidents per the GGNS EPs.

For the Offgas and Radwaste Building effluent monitor, the maximum possible vent flow which could be expected from this discharge point under accident conditions will not exceed 52,495 CFM for the following reasons.

- 1) The maximum design offgas flow is experienced during start-up and at start-up offgas flow is equal to or less than 158 CFM.
- 2) Included in the 52,495 CFM flow is 600 CFM for tank venting. It is not expected that the full 600 CFM flow would be experienced during accident conditions.
- 3) While it has been observed during plant operation that offgas flow has exceeded the design start-up flow of 158 CFM during conditions when condenser leaks occurred, it is not anticipated that the margin between building vent flow and maximum instrument range would be depleted before a shutdown would be required due to a loss of vacuum.

Therefore, while the vent flow monitoring does not have a range of 110% of normal discharge flow, the ranges are sufficient to measure the maximum possible system flow and meet the intent of Reg. Guide 1.97.

All of the changes addressed by this evaluation are intended to clarify existing conditions and do not constitute a change to existing equipment as evaluated in the FSAR. Also, there is no creation of a possibility for an accident or malfunction of a different type than any evaluated previously in the Safety Analysis Report. There is no reduction in the margin of safety as defined in the basis for any technical specification.

SRASN: NLS-87-041

DOC NO: FSAR 6.2 &amp; 6.5

SYSTEM:

DESCRIPTION OF CHANGE: This change modifies the UFSAR to add the drywell high pressure signal as an input for initiation of the Containment Spray System (CSS) logic.

REASON FOR CHANGE: To bring the FSAR into conformance with AECM-84/0093 and GGNS plant procedure 09-S-06-1, which provide that the initiation logic also includes the high drywell pressure signal.

SAFETY EVALUATION: The inclusion of the high drywell pressure signal as part of the CSS logic does not increase the probability of occurrence of an accident previously evaluated since it functions as part of the circuit logic to mitigate postulated accidents. A high containment pressure of 9 psig (also required for CSS initiation) will subsequently provide a high drywell pressure of 2 psig due to containment to drywell pressure equalization (within 1.0 psid). The high drywell pressure signal in the CSS logic provides a permissive to prevent inadvertent system actuation and is a standard design consideration for all BWR 3, 4, 5 and 6 designs. The previous GGNS FSAR analyses takes into account the assumed availability of the drywell pressure signals. A postulated failure of a high drywell pressure channel will also not prevent automatic initiation of the CSS, since there are two channels of drywell pressure per division and two divisions of containment spray. Therefore, there is no increase in the probability of occurrence or in the consequences of an accident or malfunction of equipment of safety previously evaluated in the FSAR. Nor is there created a possibility of an accident or a malfunction of equipment of a different type from any previously analyzed. Since the postulated accidents and the potential for malfunction of safety related equipment is not changed due to the inclusion of the high drywell pressure channel discussion, no change in the margin of safety as defined in the basis for any technical specification will be experienced.