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Subject: Arkansas Nuclear One - Unit 1
Docket No. 50-313
License No. DPR-51
ANO-1 10CFR50.59 Summary Report for 1994

Gentlemen:

In accordance with 10CFR50.59(b)(2), enclosed is our report containing a brief description of changes in procedures and in the facility as described in the Safety Analysis Report (SAR), tests and experiments conducted which were not described in the SAR, and other changes for which a safety evaluation was conducted, along with a summary of the safety evaluation of each. The report covers the evaluations through the end of the twelfth refueling outage (1R12) ending April 1, 1995, and is being submitted within 30 days of Amendment 13 of the SAR and related documents per letter 0CAN099503, dated September 25, 1995. Included with this summary report are those evaluations that were applicable to Arkansas Nuclear One, Unit 1 (ANO-1), and those that were common to both ANO-1 and ANO-2.

The 10CFR 50.59 summary report for ANO-2 will be submitted within 30 days following Amendment 13 of the ANO-2 SAR, scheduled for six months following the end of the eleventh ANO-2 refueling outage (2R11).

Very truly yours,

Dwight C. Mims

Dwight C. Mims
Director, Nuclear Safety

DCM/kjm

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ARKANSAS NUCLEAR ONE - UNIT-1 AND COMMON
DOCKET No. 50-313
LICENSE No. DPR-51

10CFR50.59 REPORT FOR 1994

This report contains a brief description of reportable procedure and design changes made at Arkansas Nuclear One - Unit 1 (ANO-1) and those changes common to ANO-1 and ANO-2. These summaries describe changes made to the ANO-1 Safety Analysis Report (SAR), and Licensing Basis Documents common to both units for which an evaluation was determined to be necessary. It also contains evaluations for tests and other changes that were conducted which are not described in the SAR. This report is applicable for the period from January 22, 1994, through April 1, 1995.

The safety evaluations included in this report were performed in accordance with 10CFR50.59 and determined that none of the changes involved a change to the plant's Technical Specifications or an unreviewed safety question.

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SECTION I

PROCEDURE CHANGES

ANO

PROC: 1000.001 Revision 25, PC-2

Elimination of the Supervisor, Quality Engineering, Position

This procedure revision incorporated the deletion of the position of Supervisor, Quality Engineering. Responsibilities previously assigned to that position were reassigned to the Quality Engineering staff and the Director, Quality. Overall Quality organization responsibilities were not affected by this change.

The revision affected the Quality Assurance Manual, Operations, Sections 1.3 and 3.5.4, Table 3, and Figure 5.

It was determined that these changes did not:

- (i) increase the probability of occurrence or consequence of an accident or malfunction of equipment important to safety evaluated in the Safety Analysis Report since no physical changes to the facility that would affect the probability or consequences of an accident were made, and this change had no impact on any equipment important to safety; or,
- (ii) increase the possibility for an accident or malfunction of a different type than any evaluated previously in the Safety Analysis Report since the design and design basis of ANO remained the same, and the current plant safety analysis remained complete and accurate; or,
- (iii) reduce the margin of safety as defined in the basis of any Technical Specification since this change was organizational and administrative in nature.

Organization and Responsibilities

This procedure revision consolidated the responsibilities of the Supervisor, Technical Support Training and the Supervisor, Engineer Training into one position, Supervisor, Technical Training. The Supervisor, Technical Support Training had been responsible for General Employee Training, Health Physics Training and Chemistry Training. The Supervisor, Engineer Training had been responsible for the Engineering Support Personnel Training Program. The Supervisor, Technical Training assumed all responsibilities that were previously assigned to these supervisors.

The responsibilities of the Operations Training Supervisors, Unit 1 and Unit 2 were also consolidated by this revision into one position, Supervisor, Operations Training, without reducing the requirements within the Operations Training Program.

Quality Assurance Manual Operations Section 1.0, "Organization", was affected by this revision.

It was determined that these changes did not:

- (i) increase the probability of occurrence or consequence of an accident or malfunction of equipment important to safety evaluated in the Safety Analysis Report since the organization changes within the Training Department do not directly relate to any accidents evaluated in the License Basis Documents, and the technical qualifications of the organization will be at least equivalent to those of the previous organization; or,
- (ii) increase the possibility for an accident or malfunction of a different type than any evaluated previously in the Safety Analysis Report since there were no physical changes made to any equipment associated with this restructure and therefore, the plant conditions for which the design basis accidents were performed are still valid; the plant operating procedures and the emergency operating procedures were unaffected; and the safety analysis of the facility remains complete and accurate; or,
- (iii) reduce the margin of safety as defined in the basis of any Technical Specification since the consolidation of training supervisory duties had no effect on any Technical Specification basis.

Organization and Responsibilities

This procedure revision added the new position of Manager, Support, reporting to the Director, Support.

This procedure change affected section 1.0, paragraph 1.3.3 of the Quality Assurance Manual, Operations.

It was determined that these changes did not:

- (i) increase the probability of occurrence or consequence of an accident or malfunction of equipment important to safety evaluated in the Safety Analysis Report since the technical qualifications of the management organization is at least equivalent to those of the previous organization and the organization changes within the Support Department did not directly relate to any accidents evaluated in the licensing basis documents; or,
- (ii) increase the possibility for an accident or malfunction of a different type than any evaluated previously in the Safety Analysis Report since no physical changes were associated with this organizational change and, therefore, the design and design basis of ANO remained the same; the limiting conditions for operation, limiting safety system settings and safety limits were not affected; and the safety analysis of the facility remains complete and accurate; or,
- (iii) reduce the margin of safety as defined in the basis of any Technical Specification since this change did not affect any margins of safety.

Organization and Responsibilities

This Procedure Change deleted the position of Supervisor, Quality Engineering and assigned the position responsibilities to the Quality Engineering staff and the Director, Quality.

This change affected and required a change to the Quality Assurance Manual, Operations Sections 1.3, 3.0, 7.4, 10.4; Figure F-5; and Table 3.

It was determined that these changes did not:

- (i) increase the probability of occurrence or consequence of an accident or malfunction of equipment important to safety evaluated in the Safety Analysis Report since the change did not affect any plant equipment or its operation; or,
- (ii) increase the possibility for an accident or malfunction of a different type than any evaluated previously in the Safety Analysis Report since no accident was related to this change and no physical change to any equipment or its operation was made with this change; or,
- (iii) reduce the margin of safety as defined in the basis of any Technical Specification since the change had no effect on any Technical Specification Basis.

Organization and Responsibilities

This procedure revision incorporated the change to the reporting chain of the Manager, Standards from the Plant Manager, Unit One, to the General Manager, Plant Operations.

This revision required changes to Section 1.0, Figure F-3, Figure F-2, and Appendix B of the Quality Assurance Manual Operations.

It was determined that these changes did not:

- (i) increase the probability of occurrence or consequence of an accident or malfunction of equipment important to safety evaluated in the Safety Analysis Report since this change is administrative in nature, does not change the function of the positions involved or Emergency Response Organization responsibilities, and involves no equipment; or,
- (ii) increase the possibility for an accident or malfunction of a different type than any evaluated previously in the Safety Analysis Report since this revision does not affect plant operation; or,
- (iii) reduce the margin of safety as defined in the basis of any Technical Specification since this revision has no effect upon any margin of safety defined in the Technical Specifications Bases.

Organization and Responsibilities

This revision reflected the new position of Manager, Radiation Protection/Chemistry and the position's assumption of the responsibilities of Manager, Radiation Protection and Radwaste. The new position also assumed the responsibility of providing day-to-day and long term direction to the Superintendent, Chemistry. This revision also changed the requirements of Plant Safety Committee (PSC) membership to eight in order to be consistent with Technical Specification requirements.

Sections 12.3.1, 12.3.2.5, and 12.4.2 of the ANO-2 SAR were affected by this revision, as well as the ANO-1 SAR sections listed below.

Affected SAR Sections: 11.2.6.1, 11.2.6.2.5, 11.3.2
 Table: 1-4

It was determined that these changes did not:

- (i) increase the probability of occurrence or consequence of an accident or malfunction of equipment important to safety evaluated in the Safety Analysis Report since this organizational change was administrative in nature, had no impact on previously evaluated accidents, and did not impact station systems, structures, or components; or,
- (ii) increase the possibility for an accident or malfunction of a different type than any evaluated previously in the Safety Analysis Report since this organizational change did not create any new modes of failure; or,
- (iii) reduce the margin of safety as defined in the basis of any Technical Specification since there were no applicable margins of safety defined in the Technical Specifications bases.

Change in Responsibility for the Surveillance Test Program Control

This Procedure incorporated changes resulting from a reorganization which eliminated the Operations Coordinator position and transferred Planning & Scheduling Surveillance Coordinators to the Outage Managers. Responsibility formerly assigned to the Manager, Standards for developing and maintaining policies and procedures for the surveillance and maintenance programs was reassigned to the Outage Managers. Direction, control, and overall supervision of the Fire Protection Section was assigned to the Manager, Engineering Programs. These changes did not change or delete any responsibilities within the Quality Assurance Manual Operations or the ANO Organization.

This change affected Section 1.3.1.1.6 of the QAMO

It was determined that these changes did not:

- (i) increase the probability of occurrence or consequence of an accident or malfunction of equipment important to safety evaluated in the Safety Analysis Report since these changes were organizational and administrative in nature, and did not impact any accident analyses or equipment important to safety; or,
- (ii) increase the possibility for an accident or malfunction of a different type than any evaluated previously in the Safety Analysis Report since these changes were administrative in nature and were not associated with the possibility of malfunction of equipment; or,
- (iii) reduce the margin of safety as defined in the basis of any Technical Specification since there are no applicable margins of safety defined in the Technical Specifications bases.

Preventive Maintenance (PM) Program

This procedure revision assigned responsibility for maintaining each unit's Preventive Maintenance Engineering Evaluations to the respective unit's Maintenance Manager. This responsibility had previously been assigned to the Unit 1 Maintenance Manager.

This procedure change affected section 14.3.2 of the Quality Assurance Manual Operations.

It was determined that these changes did not:

- (i) increase the probability of occurrence or consequence of an accident or malfunction of equipment important to safety evaluated in the Safety Analysis Report since the revision did not change the criteria for performance of preventive maintenance or affect any accident precursors, causes, events, plant hardware, operating procedures or emergency procedures; or,
- (ii) increase the possibility for an accident or malfunction of a different type than any evaluated previously in the Safety Analysis Report since the change only addressed administrative responsibilities and the level of control was not degraded; or,
- (iii) reduce the margin of safety as defined in the basis of any Technical Specification since administrative responsibilities for the PM program are not discussed in the Technical Specification bases for either unit.

Steam Generator Water Chemistry Monitoring

This procedure change revised the limits for chemistry operation based on the specifications shown in the most recent revision (Rev. 3) of EPRI Secondary Water Chemistry Guidelines.

Affected SAR Tables: 4-11, 9-3

It was determined that these changes did not:

- (i) increase the probability of occurrence or consequence of an accident or malfunction of equipment important to safety evaluated in the Safety Analysis Report since the contaminant levels and resulting corrosion rates in the secondary system were reduced by this change and the increase in pH decreased the consequences of a primary to secondary leak because the release of iodine is dependant on pH (as pH becomes higher the iodine is held in solution better); or,
- (ii) increase the possibility for an accident or malfunction of a different type than any evaluated previously in the Safety Analysis Report since no new corrosion mechanisms were introduced by this revision and chemistry controls were maintained; or,
- (iii) reduce the margin of safety as defined in the basis of any Technical Specification since secondary chemistry controls are not addressed in the Technical Specification bases.

Steam Generator Water Chemistry Monitoring

This procedure was revised to reflect the EPRI PWR Secondary Water Chemistry Guidelines, Revision 3, by removing the chemistry hold at 30% reactor power. This hold required that all final feedwater and condensate pump parameters listed (with the exception of iron and copper) be within specified values before escalating above 30% power.

Affected SAR Table: 4-11

It was determined that these changes did not:

- (i) increase the probability of occurrence or consequence of an accident or malfunction of equipment important to safety evaluated in the Safety Analysis Report since these changes did not affect contaminant levels allowed in the steam generators and appropriate action response and time restraints were maintained in the procedure; or,
- (ii) increase the possibility for an accident or malfunction of a different type than any evaluated previously in the Safety Analysis Report since no new corrosion mechanisms were introduced, and any potential failures or malfunctions due to secondary chemistry contaminant levels have been previously addressed; or,
- (iii) reduce the margin of safety as defined in the basis of any Technical Specification since there were no applicable margins of safety defined in the Technical Specifications bases.

Change in Responsibility for the Master Test Control List

This procedure revision incorporated changes resulting from a reorganization which eliminated the Operations Coordinator position and transferred Planning & Scheduling Surveillance Coordinators to the Outage Managers.

Responsibility formerly assigned to the Manager, Standards for developing and maintaining policies and procedures for the surveillance and maintenance programs was reassigned to the Outage Managers. Direction, control, and overall supervision of the Fire Protection Section was assigned to the Manager, Engineering Programs. These changes did not change or delete any responsibilities within the Quality Assurance Manual Operations or the ANO Organization.

Affected QAMO Section: 1.3.1.1.6

It was determined that these changes did not:

- (i) increase the probability of occurrence or consequence of an accident or malfunction of equipment important to safety evaluated in the Safety Analysis Report since these changes were organizational and administrative in nature, and did not impact any accident analyses or equipment important to safety; or,
- (ii) increase the possibility for an accident or malfunction of a different type than any evaluated previously in the Safety Analysis Report since these changes were administrative in nature and were not associated with the possibility of malfunction of equipment; or,
- (iii) reduce the margin of safety as defined in the basis of any Technical Specification since there are no applicable margins of safety defined in the Technical Specifications bases.

Preparation, Review and Approval of Preventive Maintenance Engineering
Evaluations

This procedure revision assigned responsibility for maintaining each unit's Preventive Maintenance Engineering Evaluations (PMEEs) to the respective unit's Maintenance Manager. This responsibility had previously been assigned to the Unit 1 Maintenance Manager.

This procedure change affected section 14.3.2 of the Quality Assurance Manual Operations.

It was determined that these changes did not:

- (i) increase the probability of occurrence or consequence of an accident or malfunction of equipment important to safety evaluated in the Safety Analysis Report since the revision changed the responsibility for maintaining the PMEEs but did not affect the criteria for implementation of the PMEE program, any accident precursors, causes, events, plant hardware, operating procedures or emergency procedures; or,
- (ii) increase the possibility for an accident or malfunction of a different type than any evaluated previously in the Safety Analysis Report since the change only addressed administrative responsibilities and the level of control was not degraded; or,
- (iii) reduce the margin of safety as defined in the basis of any Technical Specification since administrative responsibilities for the preventive maintenance program are not discussed in the Technical Specification bases for either unit.

Emergency Response Training Program Exercise Frequency

Section N(1.0) of the Emergency Plan was revised to incorporate the recently approved changes to 10CFR50, Appendix E, Section IV.F.3(e) and NRC Inspection Procedure 82302, "Review of Exercise Objectives and Scenarios for Power Reactors." The revision of these documents changed the frequency for which some exercise objectives are to be demonstrated from once every five years to once every six years.

It was determined that these changes did not:

- (i) increase the probability of occurrence or consequence of an accident or malfunction of equipment important to safety evaluated in the Safety Analysis Report since the Emergency Response Program was not credited with initiating an evaluated accident, these changes would not impede action to mitigate the consequences of reactor accidents that could contribute to offsite dose, and these changes did not impact any equipment important to safety; or,
- (ii) increase the possibility for an accident or malfunction of a different type than any evaluated previously in the Safety Analysis Report since these changes created no new conditions or plant operating practices that could result in a new or different type accident than those previously evaluated; or,
- (iii) reduce the margin of safety as defined in the basis of any Technical Specification since there were no margins of safety defined in the Technical Specifications bases affected.

Alternate Method of Testing Core Flood Tank Discharge Valves

This temporary procedure change provided an alternate method of stroke testing the "A" Core Flood Tank (CFT) discharge check valves. This was accomplished by pressurizing the CFT with nitrogen to push approximately 500 gallons of borated water from the tank through the check valve into the decay heat injection line to the reactor vessel.

It was determined that these changes did not:

- (i) increase the probability of occurrence or consequence of an accident or malfunction of equipment important to safety evaluated in the Safety Analysis Report since this test was performed while the reactor was in cold shutdown and the CF system was not relied on for mitigation, and operation of the decay heat system would not be adversely affected by the increase in Reactor Coolant System level; or,
- (ii) increase the possibility for an accident or malfunction of a different type than any evaluated previously in the Safety Analysis Report since this procedure did not change the function of the system or introduce the possibility of any new malfunction of equipment important to safety; or,
- (iii) reduce the margin of safety as defined in the basis of any Technical Specification since there are no margins of safety related to the testing of the CFT check valves in the Technical Specifications bases.

Installation of a Hose to Provide Temporary Cooling to the
Circulating Water Pumps

This procedure change provided guidance and controls for the installation of a hose to provide Domestic Water as temporary cooling to the Circulating Water pumps while Service Water was secured. The hose was connected from the Domestic Water header to the Service Water supply piping and from there to the Circulating Water pumps. All effected portions of these three systems are non-Q and non-seismic.

It was determined that these changes did not:

- (i) increase the probability of occurrence or consequence of an accident or malfunction of equipment important to safety evaluated in the Safety Analysis Report since the Domestic Water and Circulating Water systems are not considered accident initiators or mitigators, the probability of a loss of service water did not increase since the pressure rating for the temporary hose exceeds the pressure requirements of the service water system and the safety-related portion of the service water system will be isolated from the temporary hose installation, and the modification did not interact with any other safety systems; or,
- (ii) increase the possibility for an accident or malfunction of a different type than any evaluated previously in the Safety Analysis Report since failure of the temporary modification would only cause the Circulating Water pumps to be secured, and would have no impact on plant safety or safety related equipment; or,
- (iii) reduce the margin of safety as defined in the basis of any Technical Specification since there are no margins of safety defined in the Technical Specification bases for the Domestic or Circulating Water systems, and the safety related portion of the Service Water system was isolated from the temporary installation.

Existing Inspector Test Valves Added to Sprinkler System Drawing and Test Procedure

Two existing inspector test valves were added to the Hot Mechanic Shop and Laundry Room Sprinkler System drawing and test procedure. These valves allow testing of a flow switch and verification that fire water flow remote annunciation is operable in the event of a fire.

Affected SAR Figure: 9-16

It was determined that these changes did not:

- (i) increase the probability of occurrence or consequence of an accident or malfunction of equipment important to safety evaluated in the Safety Analysis Report since the valves are in an area where there is no safety-related equipment which could be damaged by water impingement and the valves can be isolated in the event of a failure; or,
- (ii) increase the possibility for an accident or malfunction of a different type than any evaluated previously in the Safety Analysis Report since a failure of the Fire Water system has been previously analyzed in the SAR; or,
- (iii) reduce the margin of safety as defined in the basis of any Technical Specification since these valves only provide a test location to ensure operability of remote annunciation of fire water flow.

Operation of the Control Room Chillers Using Fire Water System Cooling Water

This Procedure (PROC) change provided the capability to operate the Control Room Chillers, VCH-2A/2B when the normal cooling water supply from Auxiliary Cooling Water (ACW) is not available. A hose may be installed from the Fire Water system to the Control Room chiller, and discharged to either the ACW return or to a roof drain.

It was determined that these changes did not:

- (i) increase the probability of occurrence or consequence of an accident or malfunction of equipment important to safety evaluated in the Safety Analysis Report since these systems and equipment are not considered initiators of accidents, and the ability of the Fire Water system to perform its design function was not degraded; or,
- (ii) increase the possibility for an accident or malfunction of a different type than any evaluated previously in the Safety Analysis Report since the Fire Water system would function as designed, and this temporary connection was bounded by the analysis of Fire Water system failure; or,
- (iii) reduce the margin of safety as defined in the basis of any Technical Specification since these systems have no applicable margins of safety in the Technical Specification bases.

Emergency Cooling Pond Supply Line Cleaning

This Workplan (WP) allowed cleaning of the Emergency Cooling Pond (ECP) supply line via "pigging", a mechanical process which cleans the inside diameter of a pipe by scraping. Pigging utilizes flexible foam plugs of different diameters and materials to allow cleaning in a progressive and controlled manner.

It was determined that these changes did not:

- (i) increase the probability of occurrence or consequence of an accident or malfunction of equipment important to safety evaluated in the Safety Analysis Report since the ECP is not considered an accident initiator, and the inventory and cooling requirements of ECP were maintained and verified prior to, and subsequent to, each cleaning evolution; or,
- (ii) increase the possibility for an accident or malfunction of a different type than any evaluated previously in the Safety Analysis Report since inventory requirements were strictly maintained to support Unit 2 operability requirements, and Unit 1 was in cold shutdown; or,
- (iii) reduce the margin of safety as defined in the basis of any Technical Specification since the ECP level was maintained to meet the requirements as defined in the Technical Specification bases.

Whole Body Counting/Bioassay

This revision to Procedure 1601.209 establishes a method for monitoring personnel to determine the need for analysis of internally deposited radionuclides. This process employs a monitoring system and criteria which identify those personnel having $\geq 1\%$ Annual Limit on Intake for radioisotopes listed in 10CFR20 Appendix B, Table 1. Only those personnel receiving an alarm will receive a whole body count upon entry for employment. This revision also deletes the requirement for annual whole body counting of plant workers.

Affected SAR Section: 11.2.6.3.2

It was determined that these changes did not:

- (i) increase the probability of occurrence or consequence of an accident or malfunction of equipment important to safety evaluated in the Safety Analysis Report since the method for performing whole body counting is not considered to be an accident initiator or mitigator, this equipment does not perform a function related to plant safety, and this equipment does not contribute to the operation of equipment important to safety; or,
- (ii) increase the possibility for an accident or malfunction of a different type than any evaluated previously in the Safety Analysis Report since the performance of whole body counting does not impact plant systems important to safety; or,
- (iii) reduce the margin of safety as defined in the basis of any Technical Specification since there are no applicable margins of safety defined in the Technical Specification bases.

Post Accident Sampling System (PASS) Panel Valve Alignment

This temporary procedure change consisted of changing the normal position of PASS vent line valve 2SV-5966 from a closed position to an opened position. The purpose of this change was to protect the PASS sample booster pump from overpressurization due to a leaking discharge check valve.

It was determined that these changes did not:

- (i) increase the probability of occurrence or consequence of an accident or malfunction of equipment important to safety evaluated in the Safety Analysis Report since a large loss of Reactor Coolant through the vent line is not possible and leakage would be contained prior to causing damage to any safety related equipment; or,
- (ii) increase the possibility for an accident or malfunction of a different type than any evaluated previously in the Safety Analysis Report since any leakage from the vent line would be routed to the Auxiliary Building Sump, a condition that has been previously evaluated; or,
- (iii) reduce the margin of safety as defined in the basis of any Technical Specification since the amount of Reactor Coolant that could be lost via the vent line is insignificant.

Emergency Supplies and Equipment

The single channel analyzers previously used for determining iodine concentrations during an emergency were eliminated from the Technical Support Center and Control Room emergency kits. This Procedure Change (PC) replaces the single channel analyzer method of determining iodine concentrations with the method used in Emergency Plan Implementing Procedure (EPIP) 1905.031, "Airborne Iodine-131 Determination Using the RM-14/HP-210."

It was determined that these changes did not:

- (i) increase the probability of occurrence or consequence of an accident or malfunction of equipment important to safety evaluated in the Safety Analysis Report since use of the RM-14/HP-210 is an approved method for determining iodine concentrations used by the Emergency Offsite Radiation Team and air samples that show activity above background are sent to Chemistry for an isotopic analysis; or,
- (ii) increase the possibility for an accident or malfunction of a different type than any evaluated previously in the Safety Analysis Report since either method of determining iodine concentrations during an emergency is acceptable; or,
- (iii) reduce the margin of safety as defined in the basis of any Technical Specification since the use of a single channel analyzer for iodine detection is not referenced in the Technical Specifications.

Emergency Response Facility - Operational Support Center (OSC)

The OSC assembly area was relocated from the Maintenance Facility lunchroom to the Unit 2 Mechanical Maintenance Shop. This change was necessary to keep the OSC assembly area close to the OSC since the maintenance facility lunchroom had moved to the new Central Support Building.

The Emergency Plan definitions section was affected by this change.

It was determined that these changes did not:

- (i) increase the probability of occurrence or consequence of an accident or malfunction of equipment important to safety evaluated in the Safety Analysis Report since the relocation of the OSC assembly area did not affect the initiation or mitigation of any accidents, the performance of equipment important to safety, or the emergency response function of the OCS assembly area; or,
- (ii) increase the possibility for an accident or malfunction of a different type than any evaluated previously in the Safety Analysis Report since there is no possible accident relationship between the location of the assembly area and the performance of equipment important to safety; or,
- (iii) reduce the margin of safety as defined in the basis of any Technical Specification since there are no Technical Specification bases related to the OSC assembly area or the assembly area's function.

Addition of a Third Plant Evacuation Route

These procedure changes added references into the above listed Emergency Plan Implementing Procedures to the third plant Emergency Evacuation Route.

These changes affected Figure J-4 in the Emergency Plan.

It was determined that these changes did not:

- (i) increase the probability of occurrence or consequence of an accident or malfunction of equipment important to safety evaluated in the Safety Analysis Report since there are no accidents evaluated in the SAR associated with Emergency Evacuation Routes, and the addition of a third route would only enhance the capability to evacuate the plant site quickly and safely; or,
- (ii) increase the possibility for an accident or malfunction of a different type than any evaluated previously in the Safety Analysis Report since evacuation routes do not support or provide services to any safety related equipment; or,
- (iii) reduce the margin of safety as defined in the basis of any Technical Specification since there are no margins of safety related to evacuation routes defined in the Technical Specifications bases.

Emergency Radiological Controls

This Procedure was revised to clarify the requirement that all plant personnel and visitors wear gamma sensitive pocket dosimeters in radiologically controlled areas during normal operations. A note was also added to allow the entry of emergency response personnel into radiologically controlled areas without a dosimeter when accompanied by a Health Physics Technician.

ANO-2 SAR Section 12.3.3.1 will be affected by this revision as well as the ANO-1 SAR sections listed below.

Affected SAR Section: 11.2.6.3.1

It was determined that these changes did not:

- (i) increase the probability of occurrence or consequence of an accident or malfunction of equipment important to safety evaluated in the Safety Analysis Report since this procedure revision did not affect any events or equipment credited with initiating an accident, would not affect off-site dose conditions following an accident, and had no impact on equipment important to safety; or,
- (ii) increase the possibility for an accident or malfunction of a different type than any evaluated previously in the Safety Analysis Report since no new conditions or plant operating practices resulted from this revision that could cause a new or different type of accident; or,
- (iii) reduce the margin of safety as defined in the basis of any Technical Specification since there are no applicable margins of safety defined in the Technical Specification bases.

Steam Generator In-Situ Pressure Test

This procedure covers the pressure testing of the ANO-2 Steam Generator (S/G) tubing by Combustion Engineering Nuclear Services. Selected tubes, all containing known flaws or defects detected by eddy current testing, were hydrostatically tested while the unit was in Cold Shutdown to demonstrate compliance with Regulatory Guide 1.121 with respect to design basis strength. After the test, the tubes selected were removed from service prior to heat-up.

It was determined that these changes did not:

- (i) increase the probability of occurrence or consequence of an accident or malfunction of equipment important to safety evaluated in the Safety Analysis Report since the test was performed during a period when the S/Gs was not required to be operable; the test had no effect on the operation, function of the system, or any equipment other than the specific tubes tested; the tubes selected for the test were removed from service after the test and will no longer be relied on to perform their function during plant operation; and non-radioactive water was used as the pressurizing fluid to prevent radioactive release to the secondary system if a tube failure during the test; or,
- (ii) increase the possibility for an accident or malfunction of a different type than any evaluated previously in the Safety Analysis Report since the analysis performed by the NSSS supplier demonstrated that there were no adverse effects on the tubes or tubesheet or generation of loose parts that might contribute to an accident of a different type, and the test had no effect on any equipment or functional part of the S/G except for the tubes being tested which were removed from service after the test; or,
- (iii) reduce the margin of safety as defined in the basis of any Technical Specification since the tested tubes were removed from service after the test and there will be no effect on thermal hydraulic performance or the accident analyses regarding the S/Gs that could affect the margins of safety.

Design Engineering Organization

This procedure revision documented administrative changes which included changes in functional responsibilities in the Design Engineering group. The duties and responsibilities of the Supervisor, Fire Protection, were assumed by the Manager, Engineering Programs, and the Supervisor, Fire Protection, position was deleted from the Engineering Programs group.

This change affected the Quality Assurance Manual, Operations, Appendix B, Section 2.

It was determined that these changes did not:

- (i) increase the probability of occurrence or consequence of an accident or malfunction of equipment important to safety evaluated in the Safety Analysis Report since the administrative changes were not accident initiators and there were no physical changes to plant equipment or systems; or,
- (ii) increase the possibility for an accident or malfunction of a different type than any evaluated previously in the Safety Analysis Report since this revision was administrative in nature and did not relate to or affect any accident or malfunction evaluated in the SAR; or,
- (iii) reduce the margin of safety as defined in the basis of any Technical Specification since this revision documented administrative changes that did not change any margin of safety.

ANO

PROC: EP-P-001-00

Control of Special Processes: Welding, Heat Treatment, and Nondestructive Examination

This Design Engineering Administrative Manual subsection procedure established the overall administrative, programmatic, and operational control of the Entergy Operations, Inc. Welding Program.

This procedure required a change to section 1.3 and 1.4.2.3 of the Quality Assurance Manual Operations.

It was determined that these changes did not:

- (i) increase the probability of occurrence or consequence of an accident or malfunction of equipment important to safety evaluated in the Safety Analysis Report (SAR) since this procedure is purely administrative in nature and has no effect upon the physical operation of the existing program; or,
- (ii) increase the possibility for an accident or malfunction of a different type than any evaluated previously in the Safety Analysis Report since the codes, standards, and requirements referenced and used to develop the procedure are consistent with the codes, standards, and requirements identified in the SARs for both units regarding control of special processes; or,
- (iii) reduce the margin of safety as defined in the basis of any Technical Specification since requirements for control of special processes are neither referenced, nor identified in Unit One or Two Technical Specification Bases, and therefore will not reduce any margin of safety therein.

SECTION II
DESIGN CHANGES

Waste Gas System Modifications

This design change package installed four new simplex basket strainers, replaced twenty-three existing globe isolation valves with manual diaphragm valves, replaced two pressure safety valves, and replaced two y-type piston check valves in the Gaseous Radioactive Waste System. All new components were seismically qualified in accordance with the design basis of the Waste Gas System. This design change also changed the code classification of the waste gas piping from ANSI B31.7 to ANSI B31.1. Regulatory Guide 1.26 classifies the Gaseous Radwaste System piping standard as ANSI B31.1.

Affected SAR Figure: 11-3
 Tables: 11-19, 11-6

It was determined that these changes did not:

- (i) increase the probability of occurrence or consequence of an accident or malfunction of equipment important to safety evaluated in the Safety Analysis Report since this modification did not change the design, quality level, or radiological controls of the Waste Gas Decay Tank, and did not create any new failure modes which would result in the malfunction of equipment important to safety; or,
- (ii) increase the possibility for an accident or malfunction of a different type than any evaluated previously in the Safety Analysis Report since no new failure modes were created as a result of this change; or,
- (iii) reduce the margin of safety as defined in the basis of any Technical Specification since there were no applicable margins of safety defined in the Technical Specification bases.

Reactor Building Cranes

This design change package installed one 10-ton electro-mechanical pedestal crane near the northwest corner of the south steam generator cavity at elevation 424'. Three 2-ton capacity jib cranes were also installed on the existing steel beams located at elevation 424' above the steam generator cavities. The 10-ton crane will be left in place with the boom secured in a storage structure during unit operation. The electrical power pack and the hoist, boom, and turret motors can be removed and stored outside the reactor building. The jib cranes will remain in place with the booms secured during unit operation; however, the motorized hoists, pendant controls, and the associated cables will be removed and stored outside the reactor building prior to unit operation. All these cranes were fabricated from "Q" material and installed in accordance with Seismic Class 1 criteria to alleviate adverse system interactions between the crane and safety-related equipment during a seismic event. Also, a tie-down scheme was developed for the existing 2 1/2" grating, located on the missile shields and at the south steam generator cavity, to provide additional usable laydown area for outages.

Affected SAR Section: 9.6.1.7
 Figures: 1-2, A-1

It was determined that these changes did not:

- (i) increase the probability of occurrence or consequence of an accident or malfunction of equipment important to safety evaluated in the Safety Analysis Report since these cranes are not utilized for fuel handling, the undesirable effect of increased heat sink characteristics is negligible due to the small volume of steel, the use of the cranes is limited to shutdown modes, and the cranes do not have any direct interaction with equipment important to safety in the stored condition; or,
- (ii) increase the possibility for an accident or malfunction of a different type than any evaluated previously in the Safety Analysis Report since the cranes and their supporting foundations have been designed to withstand all appropriate loadings, are only used during refueling outages for moving equipment and for various maintenance tasks, and are designed and installed in accordance with Seismic Class I criteria for seismic II/I considerations; or,
- (iii) reduce the margin of safety as defined in the basis of any Technical Specification since no defined margins of safety were affected by the installation of these cranes.

Reactor Building Crane

This design change package installed tie down clips on the existing Reactor Building grating to provide additional laydown area for outages. The tie down clips were welded between the grating's bearing bars in four locations per section. Nelson studs were welded to the top flanges of the existing beams and the grating was reinstalled. A new hoist was also installed to accommodate the 20 foot boom installed on the jib crane.

This affected Figure 1-2 and Section 9.6.1.7

It was determined that these changes did not:

- (i) increase the probability of occurrence or consequence of an accident or malfunction of equipment important to safety evaluated in the Safety Analysis Report since this equipment is not considered an initiator or mitigator of an evaluated accident and does not impact any equipment important to safety; or,
- (ii) increase the possibility for an accident or malfunction of a different type than any evaluated previously in the Safety Analysis Report since the relocation of the grating did not affect containment volume or heat sink characteristics; or,
- (iii) reduce the margin of safety as defined in the basis of any Technical Specification since none of the margins of safety defined in the Technical Specification bases were affected by the relocation of the grating or the addition of the hoist.

Replacement of Vibration and Loose Parts Monitoring System

This Design Change Package (DCP) replaces the signal conditioning and analysis components of the Unit 1 Vibration and Loose Parts Monitoring System (VLPMS) with a state-of-the-art personal computer based VLPMS.

Affected SAR Figures: 4-1, 7-20

It was determined that these changes did not:

- (i) increase the probability of occurrence or consequence of an accident or malfunction of equipment important to safety evaluated in the Safety Analysis Report since the function of the VLPMS did not change, and the new system has refinements for better reliability, signal discrimination, and data analysis; therefore enhancing its ability to detect loose parts and/or vibration which could affect the operation of components in the Reactor Coolant System (RCS). Also, the new VLPMS did not add any new components outside the control room, is seismically qualified, is in the same cabinet as the old VLPMS, has no vital safety function, and added no new interfaces to safety related equipment; or,
- (ii) increase the possibility for an accident or malfunction of a different type than any evaluated previously in the Safety Analysis Report since a total failure of VLPMS will not affect any other equipment, the VLPMS interface to the safety related RCS is passive and non-intrusive, and its interface to safety related excore nuclear instrumentation monitoring channels is also passive; or,
- (iii) reduce the margin of safety as defined in the basis of any Technical Specification since there is no margin of safety related to the VLPMS defined in the Technical Specification Bases.

P-32B Reactor Coolant Pump Motor Replacement

This design change package replaced the Reactor Coolant Pump (RCP) 32B motor manufactured by Allis Chalmers with a new motor manufactured by Jeumont Industrie (JI). Currently there are no spare/replacement Allis Chalmers (now Siemens-Allis) motors for the RCPs and all four motors are required for full power operation. The JI replacement motor was permanently installed on P-32B, but is capable of being installed on any of the RCP motor locations.

Affected SAR Sections: 4.2.2.6, 4.3.5.1, 4.3.5.2, 4.3.5.3, 4.3.5.4, CHAP
4 TC
Figures: 11-2, 4-1, 4-17A, 4-28, 4-29, 4-30, 7-20, 7-21,
9-12, 9-3, 9-7, 9-8
Tables: 1-2, 1-5, 14-11, 4-7

It was determined that these changes did not:

- (i) increase the probability of occurrence or consequence of an accident or malfunction of equipment important to safety evaluated in the Safety Analysis Report since the JI Motor Specification was developed utilizing the Siemens-Allis RCP Motor Specification in order to ensure that the JI motor would be a replacement in fit, form, and function; or,
- (ii) increase the possibility for an accident or malfunction of a different type than any evaluated previously in the Safety Analysis Report since the failure mechanisms for the JI motor were bounded by previously evaluated accident scenarios; or,
- (iii) reduce the margin of safety as defined in the basis of any Technical Specification since the margins of safety defined in the Technical Specification bases were unaffected by the design changes made by installation and operation of the JI motor.

Service Water System Water Hammer Mitigation

This Design Change Package added a multi-holed orifice plate downstream of Service Water (SW) valve CV-3824. The purpose of the orifice was to protect all SW system components from severe water hammer caused by column separation and rejoining or valve slam. This change brought piping and support stresses caused by water hammer loads within code allowable limits.

Affected SAR Sections: 9.3.2.1, 9.9.2.3
 Figures: 5-7, 9-14, 9-18, 9-20, 9-6, 9-9
 Tables: 5-1, 9-25

It was determined that these changes did not:

- (i) increase the probability of occurrence or consequence of an accident or malfunction of equipment important to safety evaluated in the Safety Analysis Report since the SW system was not evaluated as an accident initiator, and these modifications did not introduce any new failure modes to equipment important to safety; or,
- (ii) increase the possibility for an accident or malfunction of a different type than any evaluated previously in the Safety Analysis Report since these modifications met or exceeded all design requirements of the original system; or,
- (iii) reduce the margin of safety as defined in the basis of any Technical Specification since these modifications had no impact on the margins of safety as defined in the Technical Specification bases.

Makeup/HPI Lube Oil Pump Electrical Modification

This Design Change Package (DCP) installed a pressure switch in the 'B' High Pressure Injection (HPI) pump lube oil system to facilitate the splitting of the control system into two independent trains, routed new cable and conduit to the auxiliary lube oil pumps, fire wrapped some of the conduit, and spared in place the existing conduit and cabling. these changes were made to resolve outstanding Appendix R issues.

Affected Fire Hazards Analysis: Section 5.7.1.A
 Fire Zone 10-EE Section 10.6
 Fire Zone 112-1 Section 10.8

Affected SAR Figure: 9-3

It was determined that these changes did not:

- (i) increase the probability of occurrence or consequence of an accident or malfunction of equipment important to safety evaluated in the Safety Analysis Report since the HPI system could only be an initiator of the moderator dilution accident and the new switch did not affect alarm/interlocks used to prevent improper operation of HPI system which could cause this accident; fires is not one of the accidents evaluated in the SAR and the changes made to the routing of redundant Appendix R cables were designed to ensure that a fire would not prevent a safe plant shutdown; addition of the switch did not affect operation of the HPI pump or off-site dose consequences; and all new conduit was seismically mounted and installed using approved plant procedures. The consequences of a malfunction of the "B" pump due to the new switch are no different than for the other three identical switches already installed in the system; or,
- (ii) increase the possibility for an accident or malfunction of a different type than any evaluated previously in the Safety Analysis Report since no new malfunctions of safety-related equipment were created that are not already in the Safety Analysis Report; or,
- (iii) reduce the margin of safety as defined in the basis of any Technical Specification since no Technical Specification Bases margins were affected by these changes.

Duratek Permanent Piping Installation

This modification replaced the temporary flex hosing associated with the Duratek liquid radwaste system with permanent hard piping and provided access connections for water and service air. These changes provided a permanent alternate flow path for transfer of liquid radwaste effluent to the Duratek system for processing, bypassing the clean waste filters and the radwaste demineralizers.

Affected SAR Figures: 11-1, 9-14

It was determined that these changes did not:

- (i) increase the probability of occurrence or consequence of an accident or malfunction of equipment important to safety evaluated in the Safety Analysis Report since system operating parameters were not altered, design bases requirements were maintained, and the addition of the new piping did not impact equipment important to safety; or,
- (ii) increase the possibility for an accident or malfunction of a different type than any evaluated previously in the Safety Analysis Report since the systems function is non-safety, non-Q, and no new failure modes were created; or,
- (iii) reduce the margin of safety as defined in the basis of any Technical Specification since the systems and components associated with this change will operate and function consistently with the original design without changing existing parameters that would impact margins identified in the Technical Specification Bases.

Main Chiller Interfacing Connections

This design change package added four butterfly valves in the main chiller chilled water piping and two butterfly valves in the non-nuclear Intermediate Cooling Water system. These valves were installed to add the capability to isolate the old main chillers from the new chillers, to be installed under DCP 92-1009, to allow removal of the old piping without system shutdown.

Affected SAR Figures: 9-7, 9-9

It was determined that these changes did not:

- (i) increase the probability of occurrence or consequence of an accident or malfunction of equipment important to safety evaluated in the Safety Analysis Report since the main chiller system was not evaluated as an initiator of an accident, and these modifications did not adversely affect systems, structures, or components important in mitigating accidents, or introduce any new failure modes that might impact equipment important to safety; or,
- (ii) increase the possibility for an accident or malfunction of a different type than any evaluated previously in the Safety Analysis Report since ANSI B31.1 code requirements and other design considerations were adequately addressed and these modifications did not increase the challenge to any safety system assumed to function in existing accident analyses; or,
- (iii) reduce the margin of safety as defined in the basis of any Technical Specification since there were no applicable margins of safety defined in the Technical Specification bases.

Class 1E Inverter Replacement - 1R12 Installation

This design change package replaced the inverters on the green train of the vital AC and DC systems. Enhancements to the system installed during the twelfth refueling outage (1R12) included diversification of the feeder and load circuit breakers to improve operational flexibility, addition of a swing inverter, application of inverters without rectifiers, replacement of the battery chargers, addition of a backup battery charger, and increased battery charger rating.

Affected SAR Sections: 8.1.2, 8.3.1.1.6, 8.3.1.1.8.1, 8.3.2.1, 8.3.2.1.2,
8.3.2.1.3, 8.3.2.2, 8.3.2.2.1
Figure: 8-1
Table: 1-2

It was determined that these changes did not:

- (i) increase the probability of occurrence or consequence of an accident or malfunction of equipment important to safety evaluated in the Safety Analysis Report since the design change resulted in improved equipment reliability and these modifications were bounded by existing accident analyses; or,
- (ii) increase the possibility for an accident or malfunction of a different type than any evaluated previously in the Safety Analysis Report since the failure modes and effects analyses compared with that of the original system; or,
- (iii) reduce the margin of safety as defined in the basis of any Technical Specification since the capability of the power system to provide power to the engineered safety features in the event of a design basis accident did not change.

Integrated Control System and Main Feedwater Pump
Turbine Control Modification

This Design Change (DCP) modifies plant controls in the Integrated Control System (ICS) and Non-Nuclear Instrumentation to reduce the possibility of a spurious Rapid Feedwater Reduction (RFR) and improve the response to a Main Feedwater Pump (MFWP) trip. It also upgrades the MFWP Turbine Controls to improve turbine response to ICS feedwater demand changes. This DCP also installed a handswitch in the Reactor Trip Confirm Auxiliary Relay circuit to facilitate valve stroke testing without pulling a fuse and made an unrelated cable routing change to correct a cable separation problem involving a black train cable routed through both red and green trays.

Affected SAR Sections: 10.4.7, 7.2.3.2.4, 7.2.3.2.5
Figures: 10-2, 9-14

It was determined that these changes did not:

- (i) increase the probability of occurrence or consequence of an accident or malfunction of equipment important to safety evaluated in the Safety Analysis Report since it increased the reliability and failure tolerance of the feedwater control system; did not affect steam generator high level limits; had no effect on Main Steam Line Break accident assumptions; and did not affect the plant responses to accidents, dose consequences or cause the malfunction of safety-related equipment; or,
- (ii) increase the possibility for an accident or malfunction of a different type than any evaluated previously in the Safety Analysis Report since these changes did not introduce any initial conditions or failure sequences that invalidate limiting conditions serving as design bases, and did not affect Post-trip ICS response; or,
- (iii) reduce the margin of safety as defined in the basis of any Technical Specification since secondary inventory assumptions for steam generator tube rupture provided in the basis for Technical Specifications 3.1.4 remains valid and no other bases are affected.

Unit 1 Reactor Building Sump/Drain Line Modification

This 1R12 scope of this Design Change Package (DCP) modified all Unit 1 Reactor Building basement drain lines, with the exception of the drain line under the reactor vessel. It provided structural covers and non-Q screens to protect the "Q" drain screens from failure.

Affected SAR Figure: 11-2

It was determined that these changes did not:

- (i) increase the probability of occurrence or consequence of an accident or malfunction of equipment important to safety evaluated in the Safety Analysis Report since this DCP increased the reliability of the floor drains by providing additional drain area, reducing chances for debris accumulating on grating covers and clogging the drain, and did not affect mitigation variables or accident conditions, or;
- (ii) increase the possibility for an accident or malfunction of a different type than any evaluated in the Safety Analysis Report since this DCP did not affect any accident, design, construction, or operating assumptions used to develop the types of postulated accidents, and did not introduce any conditions that could create an equipment malfunction, or;
- (iii) reduce the margin of safety as defined in the basis of any Technical Specification since the only margin specifically identified in the Technical Specifications is the ability to determine an average leakage rate into the sump of one gallon per hour and this ability was unaffected by the change.

Addition of an Isolation Valve on the Service Water Return Header

This Limited Change Package (LCP) added a butterfly valve in the common Unit 1 Service Water (SW) discharge header to allow one SW loop to be isolated from the other for maintenance and modification purposes during refueling outages. When this valve is closed, Loop I discharges to the Emergency Cooling Pond and Loop II discharges to the Circulating Water Discharge Flume. This valve will be locked open when two trains of SW are required to be available.

Affected SAR Figures: 9-18, 9-20, 9-6

It was determined that these changes did not:

- (i) increase the probability of occurrence or consequence of an accident or malfunction of equipment important to safety evaluated in the Safety Analysis Report since this system was not considered an initiator, none of the mitigating activities of this system were affected by the addition of this component, and this valve is normally locked open so there is no change to the way the SW system functions in the event of a malfunction of equipment important to safety; or,
- (ii) increase the possibility for an accident or malfunction of a different type than any evaluated previously in the Safety Analysis Report since the existing postulated failure and the associated requirements for redundant SW loops bound any possible accidents that could occur subsequent to the addition of this butterfly valve; or,
- (iii) reduce the margin of safety as defined in the basis of any Technical Specification since there were no margins of safety that were affected by the addition of this butterfly valve.

Steam Generator Primary Side Drains

This Limited Change Package (LCP) made the following changes: replaced 12 Reactor Coolant System (RCS) drain valves, deleted 7 redundant RCS vent and drain valves, added flushing connections on the RCS drain header piping, changed the piping and support configuration to alleviate vibration induced problems, provided a common vent stack and a common second isolation valve on the drain header pipe for each loop/cavity (in lieu of having a vent stack and a second isolation valve for each Reactor Coolant Pump and Steam Generator), and removed RCS temporary level tubing between 2 normally closed valves (RBD-17C and RBD-21).

Affected SAR Figures: 4-1, 7-20

It was determined that these changes did not:

- (i) increase the probability of occurrence or consequence of an accident or malfunction of equipment important to safety evaluated in the Safety Analysis Report since this LCP altered no function, operation, or design basis of the system, increased the reliability of the system, affected no analysed accident initiators, altered no components which serve mitigation functions, and did not change any methods of failure, or;
- (ii) increase the possibility for an accident or malfunction of a different type than any evaluated previously in the Safety Analysis Report since this LCP did not introduce any new failure modes or affect any safety related equipment in any way different than the original design, or;
- (iii) reduce the margin of safety as defined in the basis of any Technical Specification since the Technical Specifications do not establish any margins associated with the components involved with this LCP.

1" Drain Line for Check Valve Testing

This Limited Change Package (LCP) added two new 1" globe valves, one on each line upstream of the tubing connection, to provide a larger flow path to seat check valves located in the decay heat removal (DHR)/low pressure injection (LPI) lines downstream of the DHR/LPI injection block valves. This LCP also replaced the existing instrument line tubing downstream of the root valves and installed an extension of the drain line from valves.

Affected SAR Figure: 9-12

It was determined that these changes did not:

- (i) increase the probability of occurrence or consequence of an accident or malfunction of equipment important to safety evaluated in the Safety Analysis Report since the new valves are functionally identical to vent valves throughout the system, the valves are normally closed and capped, they did not impact safety-related equipment, and they serve no accident mitigating functions, or;
- (ii) increase the possibility for an accident or malfunction of a different type than any evaluated previously in the Safety Analysis Report since this LCP did not alter the function of the present system or install valves different than the type already used in the system so that no new failure modes were created for safety-related equipment, or;
- (iii) reduce the margin of safety as defined in the basis of any Technical Specification since Technical Specification Bases do not address margin of safety related to the method of testing pressure valves. Since this LCP only improves the capability to seat these valves and the requirements for valve operability are unchanged, no margin of safety will be reduced.

Resolution of Isometric Update Project Code Compliance Issues in the
Auxilliary Building

This Limited Change Package (LCP) added approximately ten feet of insulation to a portion of the Emergency Feedwater System exhaust piping for personnel protection purposes and modified numerous pipe supports on various Auxiliary Building Systems. These actions were taken to resolve code compliance issues identified during the Isometric Update Project.

Affected SAR Section: A.7.1.2
 Tables: A-1, A-2

It was determined that these changes did not:

- (i) increase the probability of occurrence or consequence of an accident or malfunction of equipment important to safety evaluated in the Safety Analysis Report since the piping stress levels are all below the limits for which mandatory break points must be postulated. Also, the LCP did not invalidate the existing High Energy Line Break Analysis design basis, affect the operation, function, or failure modes of any system or component, affect any mitigating functions or sequence of events associated with any evaluated accidents, increase the probability of a high energy line break, or increase the probability of a malfunction of safety-related equipment; or,
- (ii) increase the possibility for an accident or malfunction of a different type than any evaluated previously in the Safety Analysis Report since this LCP did not introduce any new potential failure modes for equipment (safety-related or otherwise); or,
- (iii) reduce the margin of safety as defined in the basis of any Technical Specification since there are no margins established in the Technical Specifications that relate to high energy lines or stress levels for high energy lines.

Upgrade of Boric Acid Mix Tank and Boric Acid Addition Tank Instrumentation

This Limited Change Package replaced the previously installed pneumatic boric acid instrumentation, which consisted of boric acid mix tank level and temperature instruments, boric acid addition tank level and temperature instruments, and boric acid pump discharge pressure instruments, with functionally equivalent electric instruments.

Affected SAR Figures: 9-14, 9-4

It was determined that these changes did not:

- (i) increase the probability of occurrence or consequence of an accident or malfunction of equipment important to safety evaluated in the Safety Analysis Report since this system is not considered an accident initiator, the new electric instrument system is functionally equivalent to the previous pneumatic system and has no effect on any accident mitigation actions or assumptions, and operation or failure of this system would not impact the function or capability of any safety related systems; or,
- (ii) increase the possibility for an accident or malfunction of a different type than any evaluated previously in the Safety Analysis Report since the new electric instrument system is functionally equivalent to the previously installed pneumatic system; or,
- (iii) reduce the margin of safety as defined in the basis of any Technical Specification since the bases related to the physical characteristics of the boric acid addition tank do not rely on or reference a particular method of measuring these parameters.

Erosion Repair of the Emergency Cooling Pond Embankment

This Limited Change Package (LCP) restored eroded areas of the Emergency Cooling Pond (ECP) spillway using a filter fabric and an impervious membrane material to provide a long-term deterrent to possible future erosion. Also, stainless steel chain was used in place of galvanized rods to link the articulated concrete slabs together in some locations on the spillway slope.

ANO-2 SAR Section 9.2.5.2.1.1 and Figure 9.2-11 will be affected by this LCP as well as the ANO-1 SAR sections listed below.

Affected SAR Sections: 1.7.3, 9.3.2.4
 Figure: 9-33

It was determined that these changes did not:

- (i) increase the probability of occurrence or consequence of an accident or malfunction of equipment important to safety evaluated in the Safety Analysis Report since the ECP is a passive component, is not considered an accident initiator, and does not affect operability of any equipment important to safety; or,
- (ii) increase the possibility for an accident or malfunction of a different type than any evaluated previously in the Safety Analysis Report since the excavation for repairs did not affect the required ECP water level and did not impact any plant equipment; or,
- (iii) reduce the margin of safety as defined in the basis of any Technical Specification since the margins of safety defined in the Technical Specification bases deal with adequate inventory and these modifications will not affect the water level or degrade the ECP.

Stem Replacement for Hydrogen Purge Valves

This limited change package replaced the stems of Hydrogen Purge system inner containment isolation valves CV-7446, CV-7448, and CV-7450 with stems of stronger material to increase the allowable thrust by approximately 300% over the previous values and to provide increased margin at elevated temperatures. This LDC also modified the control function of actuators CV-7445 and CV-7449 by removing all power and control cables for these valves. The capability to reconnect power was retained so that these valves could be operated from MCC B63 if a controlled hydrogen purge is required during an emergency. The hand switches that controlled these valves were removed from Control Panel C26. Valves CV-7443 and CV-7447 were "spared in-place". Valves CV-7443, CV 7445, CV-7447, and CV-7449 were the outer containment isolation valves for the Hydrogen Purge system that was abandoned in-place when the hydrogen recombiners were installed.

Affected SAR Figure: 5-7

It was determined that these changes did not:

- (i) increase the probability of occurrence or consequence of an accident or malfunction of equipment important to safety evaluated in the Safety Analysis Report since this portion of the Hydrogen Control System was not evaluated as an initiator or a mitigator of an accident and this modification did not change the manner in which the subject valves fulfill their safety-related function; or,
- (ii) increase the possibility for an accident or malfunction of a different type than any evaluated previously in the Safety Analysis Report since these modifications enhanced the configuration of the Containment Hydrogen Control System and the containment penetrations; or,
- (iii) reduce the margin of safety as defined in the basis of any Technical Specification since there were no applicable margins of safety defined in the Technical Specification bases.

Upper and Lower North Electrical Penetration Room Wall Modifications

The Upper and Lower North Electrical Penetration Room walls were modified to restore compliance with IE Bulletin 80-11, "Masonry Wall Design." These modifications were necessary to ensure that these walls could maintain their structural integrity under design basis earthquake and maximum earthquake conditions.

Affected SAR Section: 5.3.2

It was determined that these changes did not:

- (i) increase the probability of occurrence or consequence of an accident or malfunction of equipment important to safety evaluated in the Safety Analysis Report since the failure of Seismic Class 1 structures are precluded by their design, and the modifications restored the walls to compliance with their design bases; or,
- (ii) increase the possibility for an accident or malfunction of a different type than any evaluated previously in the Safety Analysis Report; or,
- (iii) reduce the margin of safety as defined in the basis of any Technical Specification.

Replacement of the Quench Tank Line Outboard Containment Isolation Valve

The modification associated with this Limited Change Package replaced the Quench Tank line outboard containment isolation valve with a 3" ASME Section III Class 2 valve with an air diaphragm actuator.

Affected SAR Figures: 4-1, 7-20
 Table: 5-1

It was determined that these changes did not:

- (i) increase the probability of occurrence or consequence of an accident or malfunction of equipment important to safety evaluated in the Safety Analysis Report since the new valve is functionally identical to the old valve, was installed to existing standards for the system, and did not impact any equipment important to safety; or,
- (ii) increase the possibility for an accident or malfunction of a different type than any evaluated previously in the Safety Analysis Report since the new valve was installed in the same configuration and to the same specifications as the old valve. The replacement did not change the function of the system or introduce the possibility of any new malfunctions of equipment important to safety; or,
- (iii) reduce the margin of safety as defined in the basis of any Technical Specification since there is no margin of safety for this equipment defined in the Technical Specification bases.

Manual Valve Additions to the Instrument Air and Breathing Air Systems for
Local Leak Rate Testing

This Limited Change Package (LCP) added normally open gate valves IA-20 and BA-20 to the Instrument Air (IA) and Breathing Air (BA) systems, respectively. These valves provide an inboard block valve to pressurize against when performing local leak rate testing of the IA and BA inboard containment isolation valves.

Affected SAR Figure: 9-14

It was determined that these changes did not:

- (i) increase the probability of occurrence or consequence of an accident or malfunction of equipment important to safety evaluated in the Safety Analysis Report since the valves added by this LCP are in the non-safety related portions of the systems that are isolated by closed reactor building isolation valves while the unit is at power; or,
- (ii) increase the possibility for an accident or malfunction of a different type than any evaluated previously in the Safety Analysis Report since the functions of related systems inside the reactor building were not changed by the addition of these valves; or,
- (iii) reduce the margin of safety as defined in the basis of any Technical Specification since there is no margin of safety-related to the method of local leak rate testing of reactor building isolation valves defined in the Technical Specification Bases.

ANO 1R12 Rosemount Transmitter Replacement

This Limited Change Package (LCP) replaced fifteen Rosemount 1154 differential pressure transmitters identified in NRC Bulletin 90-01 as having a potential fill oil leak problem. The transmitters were replaced with identical like-for-like Rosemount transmitters manufactured after July 1989 that are not susceptible to the identified problem. Four Statham transmitters that monitor the Reactor Coolant System (RCS) Hot Leg Narrow Range (NR) level were also replaced with Rosemount 1154 transmitters. The existing Q/EQ Conax connectors and Raychem splices were replaced with EGS quick disconnects and Grayboot connectors. For the Q/non-EQ transmitters, new cables were installed between existing terminal boxes and the transmitters that were terminated on terminal strips. The Q/EQ connector/splice changeout described above was also completed for the existing "B" Steam Generator Low Level Range Transmitter and the RCS Hot Leg Wide Range Transmitter.

It was determined that these changes did not:

- (i) increase the probability of occurrence or consequence of an accident or malfunction of equipment important to safety evaluated in the Safety Analysis Report since the replacement of like-for-like transmitters and the modification of the connection and splicing arrangements does not impact any previously analyzed accident or affect the functionality or failure modes of any safety-related equipment. The Hot Leg Level Monitoring System (HLLMS) performs a trending function only, is not credited in any accident analysis, and had no new interfaces with safety-related equipment introduced by this modification; or,
- (ii) increase the possibility for an accident or malfunction of a different type than any evaluated previously in the Safety Analysis Report since this LCP did not add, delete, or modify any components that change the operating parameters of the plant, did not introduce any failure modes, and did not impact the functionality of the HLLMS system; or,
- (iii) reduce the margin of safety as defined in the basis of any Technical Specification since replacement of like-for-like transmitters and associated connector/splice modification did not introduce any errors that were not bounded by existing calculations and the HLLMS does not have any margins of safety associated with instrument accuracy identified in the Technical Specification Bases.

Yoke Modification for CV-2415

This Limited Change Package (LCP) replaced the valve yoke and adapter plate on the Core Flood Tank Isolation Valve (CV-2415) with a single piece fabricated yoke. This yoke was custom built to specifically fit a new valve bonnet for CV-2415. The valve design includes a function to eliminate torque on the stem and a "live, spring loaded" packing to eliminate leakage. Therefore, the stem leak off tubing has been eliminated from the modified yoke design.

Affected SAR Section: 6.1.2.4.4

It was determined that these changes did not:

- (i) increase the probability of occurrence or consequence of an accident or malfunction of equipment important to safety evaluated in the Safety Analysis Report since this modification does not change the function of the valve or system which are neither accident initiators nor mitigators, or;
- (ii) increase the possibility for an accident or malfunction of a different type than any evaluated previously in the Safety Analysis Report since the components affected are outside the Reactor Coolant System pressure boundary, and the the impact of stem leakage is confined to the valve, or;
- (iii) reduce the margin of safety as defined in the basis of any Technical Specification since there is no margin of safety defined in the Technical Specifications Bases related to packing leakage.

VUC-7A Coil Replacement Modifications

This Limited Change Package modified walls and supports to allow ease of future coil replacements to the "A" High Pressure Injection (HPI) pump room cooler. Modifications included installation of permanent access openings in block walls 4-B-39 and 40 and the addition of a sheet metal closure plate as a radiant energy heat shield over the access opening. Carbon steel piping between the coil and the Service Water (SW) supply and return piping was replaced with stainless steel piping to reduce galvanic corrosion affects in the coil header.

Affected SAR Figure: 9-6

It was determined that these changes did not:

- (i) increase the probability of occurrence or consequence of an accident or malfunction of equipment important to safety evaluated in the Safety Analysis Report since only SW Loop 1 was affected and total failure of Loop 1 was evaluated in the SAR, and these changes only increase coil life and improve equipment reliability; or,
- (ii) increase the possibility for an accident or malfunction of a different type than any evaluated previously in the Safety Analysis Report since the replacement coil and attached piping perform the same function as those components originally installed, and materials and installation was equivalent to or better than the original; or,
- (iii) reduce the margin of safety as defined in the basis of any Technical Specification since there is no applicable margin of safety defined in the Technical Specification bases.

Service Water Crossover Valves Logic and Fire Protection

This limited change package developed a logic which would allow the Service Water (SW) loop crosstie valves to be maintained open with any pump combination during normal operation. This revised logic permits the Auxiliary Cooling Water to be shared by both SW loops, with any combination of SW pumps, while maintaining single failure criteria and loop separation during emergency operation.

This LCP affected ANO-2 SAR Figure 9.5-1 sheets 5 and 7 as well as the ANO-1 SAR sections listed below.

Affected SAR Sections: 9.3.2.1, 9.8.2
 Figures: 9-10, 9-14, 9-17, 9-19

It was determined that these changes did not:

- (i) increase the probability of occurrence or consequence of an accident or malfunction of equipment important to safety evaluated in the Safety Analysis Report since the SW system was not considered an accident initiator, this modification was bounded by the existing analysis, and no new failure modes were introduced by modifying the crossover valve logic; or,
- (ii) increase the possibility for an accident or malfunction of a different type than any evaluated previously in the Safety Analysis Report since all possible failure modes for the new configuration were considered and were bounded by existing accident analysis; or,
- (iii) reduce the margin of safety as defined in the basis of any Technical Specification since the overall function and failure modes of the crossover valves were not changed.

Nitrogen Line Upgrade to Steam Generators

This plant change installed separate pressure reducing stations in the nitrogen supply to Steam Generators E-24A and E-24B.

Affected SAR Figure: 9-4

It was determined that these changes did not:

- (i) increase the probability of occurrence or consequence of an accident or malfunction of equipment important to safety evaluated in the Safety Analysis Report since the nitrogen supply is only used when the steam generators are out of service and are not relied upon for heat removal; or,
- (ii) increase the possibility for an accident or malfunction of a different type than any evaluated previously in the Safety Analysis Report since the materials used for the new station conformed to the same standards of those used in the original installation and any leakage of nitrogen would not impact plant equipment since nitrogen is an inert gas; or,
- (iii) reduce the margin of safety as defined in the basis of any Technical Specification since there were no applicable margins of safety defined in the Technical Specifications bases.

Addition of a Flow Totalizer to the Condenser Makeup Line

This Plant Change added a flow element and indicator to the condenser make-up line to improve monitoring of primary-to-secondary leakage.

Affected SAR Figure: 10-2

It was determined that these changes did not:

- (i) increase the probability of occurrence or consequence of an accident or malfunction of equipment important to safety evaluated in the Safety Analysis Report since the equipment added is not considered an initiator of any accidents evaluated in the SAR, is not relied upon for accident mitigation, and does not impact equipment important to safety; or,
- (ii) increase the possibility for an accident or malfunction of a different type than any evaluated previously in the Safety Analysis Report since the added instrumentation is physically separated from equipment important to safety and does not introduce any new conditions or operating practices; or,
- (iii) reduce the margin of safety as defined in the basis of any Technical Specification since there are no margins of safety defined in the Technical Specification bases for the affected line or its associated instrumentation.

Traveling Screen Spray Header Replacement

This plant change replaced the existing carbon steel traveling screen spray headers with new stainless steel headers. The screen wash system removes debris collected by the Intake Canal traveling screens by washing the debris into a sluiceway. The new spray header design provides greater wash efficiency, thereby reducing carryover of debris into the circulating water bays. The new headers also reduce problems associated with spray nozzle loosening caused by corrosion of the carbon steel headers.

Affected SAR Figure: 9-10

It was determined that these changes did not:

- (i) increase the probability of occurrence or consequence of an accident or malfunction of equipment important to safety evaluated in the Safety Analysis Report since the screen wash system was not evaluated as an initiator or a mitigator of an accident and this modification did not create any new modes of failure; or,
- (ii) increase the possibility for an accident or malfunction of a different type than any evaluated previously in the Safety Analysis Report since this modification did not introduce any new conditions or plant operating practices and did not affect any equipment important to safety; or,
- (iii) reduce the margin of safety as defined in the basis of any Technical Specification since there are no applicable margins of safety defined in the Technical Specification bases.

Secondary Sample System Pressure Regulators

This Plant Change (PC) installed pressure regulating control valves (PCVs) on sample lines in the secondary sample room in order to enhance pressure control and prevent component damage. The PC also added a tee to the sample lines near the temperature element and routed part of the sample flow to a nearby drain header. A flow indicating control valve was included to allow regulating the flow through this temperature sensing line and relocated existing PCVs at the condensate polisher sample panels to prevent component damage due to dead-heading the valves.

Affected SAR Figure: 9-10

It was determined that these changes did not:

- (i) increase the probability of occurrence or consequence of an accident or malfunction of equipment important to safety evaluated in the Safety Analysis Report since the added/affected equipment is not credited with initiating any of the evaluated accidents, is not related to safety, is not relied upon for accident mitigation, did not change the effectiveness or type of monitoring performed, will not affect off-site conditions following an accident, and created no new scenarios; or,
- (ii) increase the possibility for an accident or malfunction of a different type than any evaluated previously in the Safety Analysis Report since there are no new conditions or plant operations resulting from this PC which could cause a non-evaluated accident; or,
- (iii) reduce the margin of safety as defined in the basis of any Technical Specification since there are no margins of safety defined in the Technical Specification bases for the affected secondary sample system components.

Batwing and Service Structure Modification

This Plant Change (PC) 94-7016 documents the change to air operation for stud tensioning and tooling hoists. These air operated hoists are used during outage maintenance with Reactor Vessel Head Detensioning and Tensioning. Two minor modifications were also made to the Control Rod Drive Service Structure (CRDSS) by this change. One modification involved cutting four holes in the top plates of the batwings to allow access to the batwing hold-down bolts without scaffolding or extension ladders. The other modification drilled and tapped holes in the CRDSS monorail web to be used to seismically restrain the stud tensioner hoist trolleys during power operations.

Affected SAR Section: 9.6.1.6

It was determined that these changes did not:

- (i) increase the probability of occurrence or consequence of an accident or malfunction of equipment important to safety evaluated in the Safety Analysis Report since the Stud Tensioner Hoists are used only during outages, are not vital to safe operation of the plant, and all air-related equipment was installed in accordance with current specifications consistent with original code. The Stud Tensioner Hoists and Stud Tensioner Hoist trolley air motors are removed from the Reactor Building during plant operation, and the Stud Tensioner Trolley (which stays installed on the CRDSS monorail during operation) is seismically restrained, the change from hand to air operation for the hoists is bounded by current design evaluation, and the use of air operated hoists during outages will not increase the chances of a safety related malfunction; or,
- (ii) increase the possibility for an accident or malfunction of a different type than any evaluated previously in the Safety Analysis Report since no mechanism exists through which failure of the Stud Tensioner Hoists could cause a release of radioactivity. The change of operation from hand to air and/or the failure to operate has no impact upon safety related equipment, and the Stud Tensioner Hoists are removed from the reactor vessel when reactor core is exposed; or,
- (iii) reduce the margin of safety as defined in the basis of any Technical Specification since there is no Technical Specifications margin of safety for these hoists.

Low Condenser Vacuum Alarm Annunciator

This Plant Change (PC) 94-7026 added an annunciator for low condenser vacuum to the control room. The existing annunciator for low condenser vacuum will be relabeled "Vacuum Low ADV Control Actuated."

Affected SAR Figures: 10-2, 7-22

It was determined that these changes did not:

- (i) increase the probability of occurrence or consequence of an accident or malfunction of equipment important to safety evaluated in the Safety Analysis Report since the affected equipment is not an accident initiator or mitigator; the changes did not affect off-site dose consequences; the affected equipment and instrumentation is not safety-related; and plant operating parameters, conditions, or responses were not altered; or,
- (ii) increase the possibility for an accident or malfunction of a different type than any evaluated previously in the Safety Analysis Report since this change did not affect safety-related equipment and did not affect plant conditions or controls that would increase the possibility for an unevaluated accident; or,
- (iii) reduce the margin of safety as defined in the basis of any Technical Specification since the circuitry for the affected annunciators and condenser vacuum pressure switches are not mentioned in the Technical Specifications Bases and do not affect any margins of safety therein.

Replacement of FW-9A

This Plant Change (PC) replaced a globe valve (FW-9A) with a gate valve to enhance the isolation capability. The valve isolates the main feedwater headers from the main condensers and is used during outages as part of the long-path clean-up line to bring secondary chemistry within specified values prior to establishing flow to the steam generators.

Affected SAR Figure: 10-2

It was determined that these changes did not:

- (i) increase the probability of occurrence or consequence of an accident or malfunction of equipment important to safety evaluated in the Safety Analysis Report since the replaced valve is not an accident initiator, does not affect the system's operation or interfaces with other systems, does not affect offsite dose consequences, mitigation, assumptions related to accident analysis, or plant operation, and creates no new release path. Also, the valve is not safety-related, is physically separated from safety related equipment by distance and barriers, and meets or exceeds all system operating requirements; or,
- (ii) increase the possibility for an accident or malfunction of a different type than any evaluated previously in the Safety Analysis Report since the original accident analysis was not affected by this PC; failure modes, conditions, or consequences were not altered; and the valve poses no indirect threat (i.e., seismic, missile, etc.) to any safety-related equipment, or;
- (iii) reduce the margin of safety as defined in the basis of any Technical Specification since there are no margins of safety in the Technical Specifications Bases related to or affected by the valve replacement.

Removal of Door 27 and Surrounding Frame

This Plant Change removed Door 27 and its surrounding frame from the corridor that leads to the Waste Gas Treatment Area on Elevation 354 in the Unit 1 Auxiliary Building. This was a solid metal door whose design prevented the door from serving as a flood barrier and airtight boundary, a missile door, or a security door.

This change affected Fire Hazards Analysis FP-104

It was determined that these changes did not:

- (i) increase the probability of occurrence or consequence of an accident or malfunction of equipment important to safety evaluated in the Safety Analysis Report since the door was not evaluated as an initiator or a mitigator of an accident and had no interaction with any equipment important to safety; or,
- (ii) increase the possibility for an accident or malfunction of a different type than any evaluated previously in the Safety Analysis Report since the door was not relied upon for the operation of any equipment and did not serve as a barrier to flood, fire, missiles, or air; or,
- (iii) reduce the margin of safety as defined in the basis of any Technical Specification since there were no applicable margins of safety as defined in the Technical Specification bases.

Circulating Water Discharge Sample Equipment Removal

This modification removed the non-Q, abandoned in place, chloride monitoring equipment from its location outside of the security area on the east side of the discharge canal. Portable sample equipment is utilized instead of the equipment that was removed.

Affected SAR Figure: 9-10

It was determined that these changes did not:

- (i) increase the probability of occurrence or consequence of an accident or malfunction of equipment important to safety evaluated in the Safety Analysis Report since the equipment that was removed was not considered an accident initiator or mitigator, and did not interface with any plant components or systems; or,
- (ii) increase the possibility for an accident or malfunction of a different type than any evaluated previously in the Safety Analysis Report since the equipment that was removed was inactive and was remote from any equipment important to safety; or,
- (iii) reduce the margin of safety as defined in the basis of any Technical Specification since there were no applicable margins of safety defined in the Technical Specification bases.

Auxiliary Fuel Handling Bridge Modification

This Plant Change (PC) modified the Auxiliary Fuel Handling Bridge. It removed the Motor Control Center (MCC), installed handrailing over the vacancy left by the MCC, and extended the bridge handwheel to allow access from the south side of refueling canal. The bridge is not capable of fuel movement in the modified configuration. It will be used as a work platform only.

Affected SAR Sections: 9.6.1.6, 9.6.2.2, 9.6.2.3

It was determined that these changes did not:

- (i) increase the probability of occurrence or consequence of an accident or malfunction of equipment important to safety evaluated in the Safety Analysis Report since the Auxiliary Fuel Handling Bridge is not an analyzed accident initiator or contributor, is not required for accident mitigation, and does not increase the likelihood or magnitude of offsite doses in the event of an accident. The PC did not alter the bridge's superstructure, allow the bridge configuration to fall outside of its design bases, or alter the consequences of a malfunction of equipment important to safety; or,
- (ii) increase the possibility for an accident or malfunction of a different type than any evaluated previously in the Safety Analysis Report since the change did not alter interlocks or safety features, did not allow the bridge to be operated in a previously unanalysed manner, did not affect the bridge's original acceptance criteria, codes, standards, or quality assurance requirements, and will not cause malfunction of safety related equipment; or,
- (iii) reduce the margin of safety as defined in the basis of any Technical Specification since there is no margin of safety defined in the Technical Specifications bases regarding the Auxiliary Fuel Handling Bridge.

Service Water Corrosion Monitoring Supply Modification

This Plant Change (PC) changed the Service Water (SW) supply to the Service Water Corrosion Rack from valve SW-2007 to SW-2006. Valve SW-2007 is a gate valve located such that SW flow is interrupted when E-28A cooler is isolated. Valve SW-2006 is a vent valve on the supply header and will provide a more reliable flow of water to the corrosion rack.

Affected SAR Figure: 9-6

It was determined that these changes did not:

- (i) increase the probability of occurrence or consequence of an accident or malfunction of equipment important to safety evaluated in the Safety Analysis Report since the portion of the SW system affected by this change is isolated during accident conditions and operability of the SW system is not affected; or,
- (ii) increase the possibility for an accident or malfunction of a different type than any evaluated previously in the Safety Analysis Report since this change affects only the non-Q portion of the SW system and is bounded by existing accident analyses; or,
- (iii) reduce the margin of safety as defined in the basis of any Technical Specification since there is no margin to safety which is affected by this change.

Service Water Pipe Replacement for Refueling Outage 1R12

This Plant Change (PC) replaced non-Q Service Water (SW) piping, removed unused fittings from the SW system and documented material changes from ASTM to ASME procurement requirements. The PC also upgraded the piping and fittings on the SW side of the Intermediate Cooling Water heat exchangers from carbon to stainless steel to provide increased service life of the components.

Affected SAR Figure: 9-6

It was determined that these changes did not:

- (i) increase the probability of occurrence or consequence of an accident or malfunction of equipment important to safety evaluated in the Safety Analysis Report since SW system is not an accident initiator, the accident mitigation function of the SW system was not degraded by this change, and the portion of the SW system involved in the piping material change is isolated during an accident by an Engineered Safeguards signal; or,
- (ii) increase the possibility for an accident or malfunction of a different type than any evaluated previously in the Safety Analysis Report since only the non-Q portion of the SW system which supplies non-Q equipment was affected by this PC and there was no impact on the function or operation of the SW system or any equipment important to safety; or,
- (iii) reduce the margin of safety as defined in the basis of any Technical Specification since material specifications of the SW system are not defined in the bases of the Technical Specifications.

Service Water Pipe Replacement for Refueling Outage 1R12

This revision to the Plant Change (PC) added two thermowells to the Service Water (SW) system. These thermowells were added at the outlets of the "A" and "B" decay heat coolers to facilitate more accurate thermal testing.

It was determined that these changes did not:

- (i) increase the probability of occurrence or consequence of an accident or malfunction of equipment important to safety evaluated in the Safety Analysis Report since the SW system is not an accident initiator, and neither the operation nor the function of the SW return piping was degraded by the additional equipment because the thermowells were designed to meet the pressure and temperature performance requirements of the SW system piping and installed in accordance with applicable codes and specifications; or,
- (ii) increase the possibility for an accident or malfunction of a different type than any evaluated previously in the Safety Analysis Report; or,
- (iii) reduce the margin of safety as defined in the basis of any Technical Specification since no margins were defined in the bases of the Technical Specifications that would be impacted by this PC.

Removal of Respirator Laundry Room Equipment

This Plant Change (PC) removed unused respirator laundry room equipment from Room 125 on elevation 386 in the Unit 1 Auxiliary Building. The removed equipment consisted of two laundry dryers, two laundry dryer motors, an ultrasonic cleaning unit, and two water supply valves.

Affected SAR Figure: 9-16

It was determined that these changes did not:

- (i) increase the probability of occurrence or consequence of an accident or malfunction of equipment important to safety evaluated in the Safety Analysis Report since none of the components removed are considered in the SAR as initiators or mitigators of an accident; or,
- (ii) increase the possibility for an accident or malfunction of a different type than any evaluated previously in the Safety Analysis Report since the removal of this equipment does not impact any safety related equipment or systems; or,
- (iii) reduce the margin of safety as defined in the basis of any Technical Specification since this system is not addressed in the Technical Specifications bases.

Reconfiguration of the Abandoned Emergency Feedwater Steam Turbine
Overpressure Relief Stack

This Plant Change modified the abandoned Emergency Feedwater (EFW) steam turbine overpressure relief stack to allow an unobstructed opening from the old Startup Boiler Room to the EFW pump room at the 345 elevation. The relief stack penetrates the fire/flood barrier wall separating the rooms. Blind flanges were installed on both ends of the stack to maintain the pipe as a continuous run, thereby causing no change to the fire/flood barrier.

It was determined that these changes did not:

- (i) increase the probability of occurrence or consequence of an accident or malfunction of equipment important to safety evaluated in the Safety Analysis Report since the modification maintained the relief stack in a configuration equivalent to its original configuration regarding fire and flood barrier qualifications, and did not directly impact any equipment important to safety; or
- (ii) increase the possibility for an accident or malfunction of a different type than any evaluated previously in the Safety Analysis Report since the pipe itself serves no safety function, and the modification was implemented to maintain the integrity and qualifications of the fire/flood barrier which it penetrates; or,
- (iii) reduce the margin of safety as defined in the basis of any Technical Specification since the relief stack was configured to maintain the integrity and qualifications of the barrier through which it passes.

Emergency Diesel Generator Fuel Oil Header Isolation Valve Position

The Unit 2 Emergency Diesel Generator (EDG) fuel oil header isolation valve (FO-116) position was changed from normally closed to normally open. This valve is stuck open and maintenance has not been possible since the valve is located approximately 8 feet under ground inside a 12 inch concrete tile. Applicable procedures were reviewed and it was determined that the position of FO-116 may remain normally open for all modes of plant operation based on the availability of isolation valves downstream and upstream to provide isolation.

Affected SAR Figure: 8-3

It was determined that these changes did not:

- (i) increase the probability of occurrence or consequence of an accident or malfunction of equipment important to safety evaluated in the Safety Analysis Report since this system and its components are not identified as accident initiators, the fuel oil contained in the Diesel Oil Storage Tank is not relied on for accident mitigation; or,
- (ii) increase the possibility for an accident or malfunction of a different type than any evaluated previously in the Safety Analysis Report since no physical change to the system was performed, and the position of FO-116 does not affect the operability of any safety-related systems or subsystems; or,
- (iii) reduce the margin of safety as defined in the basis of any Technical Specification since there was no margin of safety for this valve defined in the Technical Specification bases.

Reactor Head Gasket Leak Detector Annunciator Modification

The Reactor Head Gasket Leak Detector Annunciator instrument string was modified by replacing the string combination of TT-1052 and TS-1052 with a single component labeled TS-1052.

Affected SAR Figures: 4-1, 7-20

It was determined that these changes did not:

- (i) increase the probability of occurrence or consequence of an accident or malfunction of equipment important to safety evaluated in the Safety Analysis Report since the Reactor Head Gasket Leak Detector annunciator instrument string is not considered either an accident initiator or an accident mitigator, and the modification did not alter or degrade the design basis of the instrument string; or,
- (ii) increase the possibility for an accident or malfunction of a different type than any evaluated previously in the Safety Analysis Report since the annunciator instrument string modification did not adversely impact any accident initiators or any equipment important to safety; or,
- (iii) reduce the margin of safety as defined in the basis of any Technical Specification since the Reactor Head Gasket Leak Detector annunciator is not addressed in any Technical Specification bases.

Engineering Evaluation of Long Emitter Incore Detectors

Plant Engineering Action Request (PEAR) 94-0218 evaluated increasing the length of the replacement Rhodium emitters of the Incore Detector Assemblies from 4.74 inches to 15.75 inches to decrease measurement uncertainty. Beginning with the current cycle (Cycle 13), these new long emitters are being installed as the old short emitters are depleted. Unit One will operate with a mixture of long and short emitters until all of the short emitters are depleted.

Affected SAR Table: 7-11

It was determined that these changes did not:

- (i) increase the probability of occurrence or consequence of an accident or malfunction of equipment important to safety evaluated in the Safety Analysis Report since the length of the Rhodium emitter, normal operating full range current, and maximum current output of the Incore Detectors are neither contributing factors to the initiation of any evaluated accident nor do they affect offsite dose consequences of any analyzed accident. Also, this PEAR does not affect any safety related equipment, and the Incore Detectors do not perform any safety related functions, or;
- (ii) increase the possibility for an accident or malfunction of a different type than any evaluated previously in the Safety Analysis Report since this PEAR did not alter the operation of the Incore Detector or the Core Exit Thermocouple Systems, does not require new equipment/modifications to Incore Detector or Core Exit Thermocouple Systems, does not involve non-analyzed circumstances, does not require the plant to operate in a non-analyzed manner, and does not create any new types of safety related malfunctions, or;
- (iii) reduce the margin of safety as defined in the basis of any Technical Specification since the length of the emitter, normal full operating range, and maximum current output of the Self Powered Neutron Detectors are not specified in the Technical Specifications Bases.

SECTION III

TEMPORARY MODIFICATIONS

Diversified Technologies Filtration Skid

This temporary modification (TM) permitted connection of a Diversified Technologies portable demineralizer system to the Unit-1 Liquid Radwaste (LRW) system while the permanent connection specified in Design Change Package 93-1006 was installed.

SAR Figure 11-1 will be rendered temporarily inaccurate by this temporary modification.

It was determined that these changes did not:

- (i) increase the probability of occurrence or consequence of an accident or malfunction of equipment important to safety evaluated in the Safety Analysis Report since the equipment associated with this TM are not accident initiators and no change was made to the methodology of radioactive liquid processing; or,
- (ii) increase the possibility for an accident or malfunction of a different type than any evaluated previously in the Safety Analysis Report since this TM did not incorporate or involve any component important to safety, and any spill of radioactive liquids would be controlled in the Auxiliary Building and routed through the local drains back into the LRW system; or,
- (iii) reduce the margin of safety as defined in the basis of any Technical Specification since the operations described in this temporary modification are not addressed in the basis of any Technical Specifications.

Transfer of Borated Water from Unit 2 to Unit 1

This Temporary Modification (TM) provided the ability to transfer borated water from the Unit 2 Boric Acid Makeup Tank (BAMT) 2T-6B to the Unit 1 Boric Acid Addition Tank (BAAT) T-6 using two inch flexible hose and a transfer pump. A condensate line was used to flush the transfer hoses.

It was determined that these changes did not:

- (i) increase the probability of occurrence or consequence of an accident or malfunction of equipment important to safety evaluated in the Safety Analysis Report since the equipment associated with the TM is not considered an accident initiator, and the TM did not change any configuration or line-up of the systems; or,
- (ii) increase the possibility for an accident or malfunction of a different type than any evaluated previously in the Safety Analysis Report since this TM did not involve any components important to safety; or,
- (iii) reduce the margin of safety as defined in the basis of any Technical Specification since there is no applicable margin of safety defined in the Technical Specifications bases.

RS2 AND RS4 Temporary Power Modification

This Temporary Modification (TM) supplied temporary 120 VAC from the spare inverter (Y26) to Engineered Safeguards distribution panels RS2 and RS4. A 100 amp circuit breaker was installed in RS4 breaker position 16 to back-feed the temporary power. 120 VAC from RS4 was jumpered over to RS2 by installing 50 amp circuit breakers in RS4-18 and RS2-14, and installing #6 AWG temporary cables between them.

It was determined that these changes did not:

- (i) increase the probability of occurrence or consequence of an accident or malfunction of equipment important to safety evaluated in the Safety Analysis Report since this modification did not affect any accident initiators, did not alter any assumptions previously made in evaluating the consequences of an accident, and the affected equipment important to safety was not required to be operable in the refueling shutdown mode when this modification was installed; or,
- (ii) increase the possibility for an accident or malfunction of a different type than any evaluated previously in the Safety Analysis Report since the reactor was in refueling shutdown mode when this modification was installed and loss of RS2 and/or RS4 would have had no adverse affects; or,
- (iii) reduce the margin of safety as defined in the basis of any Technical Specification since the reactor was in refueling shutdown while this modification was installed the margins of safety associated with the affected 120 VAC Engineered Safeguards distribution panels did not apply.

Installation of Temporary Power to Engineered Safety Features (ESF)
Distribution Panel RA2

Installation of the new "green" train battery chargers required 125 VDC Motor Control Center D02 to be deenergized. This Temporary Modification (TM) supplied temporary power to distribution panel RA2, during the period that D02 was deenergized, to maintain the capability to operate the "green" train containment isolation valves.

It was determined that these changes did not:

- (i) increase the probability of occurrence or consequence of an accident or malfunction of equipment important to safety evaluated in the Safety Analysis Report since the reactor was in cold shutdown when the TM was installed, RA2 was not required to perform any safe shutdown function in this mode, and restrictions were in place to ensure that the containment isolation valves powered from RA2 had 125 VDC control power and were operable when fuel handling was in progress; or,
- (ii) increase the possibility for an accident or malfunction of a different type than any evaluated previously in the Safety Analysis Report since RA2 failure, with the plant in cold shutdown, would not affect decay heat removal or spent fuel cooling, and the redundant motor operated valve for this penetration was not affected; or,
- (iii) reduce the margin of safety as defined in the basis of any Technical Specification since the reactor was in cold shutdown when the TM was installed, and margins of safety associated with the affected 125 ESF distribution panel do not apply.

Temporary Cooling Water Supply for the Spent Fuel Pool

This Temporary Modification (TM) installed piping and hoses from the Fire Water header to Intermediate Cooling Water (ICW) Cooler E-28C inlet and from the E-28C outlet to the Auxiliary Cooling Water (ACW) return header. This modification provided temporary cooling water for Spent Fuel Pool (SFP) cooling during refueling outage 1R12 while the Unit 1 Service Water (SW) system was out of service and the reactor was defueled.

It was determined that these changes did not:

- (i) increase the probability of occurrence or consequence of an accident or malfunction of equipment important to safety evaluated in the Safety Analysis Report since this activity is not considered an initiator; the ICW, ACW, SFP, and the affected portion of the SW system were not credited as being mitigators for any SAR evaluated accidents; and this TM did not affect any safety related equipment; or,
- (ii) increase the possibility for an accident or malfunction of a different type than any evaluated previously in the Safety Analysis Report since credible failure modes for the TM were bounded by accidents previously analyzed in the SAR; or,
- (iii) reduce the margin of safety as defined in the basis of any Technical Specification since there are no margins of safety in the Technical Specification bases that are affected by this activity.

Installation of a Temporary Fire Pump at the Unit 2 Intake Structure

This Temporary Modification (TM) installed a motor driven fire pump on the lower grating at the east side of the Unit 2 Intake Structure to supply cooling water to various heat loads while the Auxiliary Cooling Water and Service Water systems were secured. Connections to the fire water system were made at the test header on the outside west wall of the Unit 1 Intake Structure. A manual isolation valve and a check valve were installed at the test header to prevent back-flow in the event the temporary system failed.

It was determined that these changes did not:

- (i) increase the probability of occurrence or consequence of an accident or malfunction of equipment important to safety evaluated in the Safety Analysis Report since this system is not considered an accident initiator, the fire water system's ability to perform its function was not degraded, and no equipment important to safety was affected by this TM; or,
- (ii) increase the possibility for an accident or malfunction of a different type than any evaluated previously in the Safety Analysis Report since the installation and operation of the temporary fire pump did not impair the ability of the permanent fire water system to perform its design function; or,
- (iii) reduce the margin of safety as defined in the basis of any Technical Specification since installation and operation of the temporary fire pump presented no new avenues for degradation of safety.

Installation of Temporary Power Cables to Unit 1
Emergency Filtration Unit VSF-9

This Temporary Modification (TM) installed temporary power cables from Unit 2 to the Unit 1 Emergency Filtration Unit, VSF-9, while both Unit 1 Emergency Diesel Generators were inoperable during refueling outage 1R12. These cables, which supplied vital power to VSF-9, were routed in seismically qualified conduit temporarily installed on the floor between the Motor Control Centers. This TM also temporarily powered the Unit 1 Control Room "Green" Emergency Isolation Logic Circuit from a Unit 2 source to provide VSF-9 auto-start capability.

It was determined that these changes did not:

- (i) increase the probability of occurrence or consequence of an accident or malfunction of equipment important to safety evaluated in the Safety Analysis Report since the systems involved are not considered accident initiators, and this TM allowed the Control Room Ventilation and Filtration System to maintain its ability to perform its design function of isolating and filtering the Control Room air space; or,
- (ii) increase the possibility for an accident or malfunction of a different type than any evaluated previously in the Safety Analysis Report since no new modes of operation of existing equipment were created by this TM that would allow this system to be an initiator of an accident, and the temporary power supply was consistent with the design and quality requirements defined in the Licensing Basis Documents; or,
- (iii) reduce the margin of safety as defined in the basis of any Technical Specification since the equipment affected by this TM remained capable of fulfilling its intended safety functions as defined in the Technical Specification Bases for both units.

Temporary BAAT (T-6) Level Indication

A tygon tube and scale were installed to provide temporary level indication of the Boric Acid Addition Tank (BAAT) while the tank level transmitter was being replaced under Limited Change Package 93-5037.

SAR Figure 9-4 was rendered temporarily incorrect by this temporary modification

It was determined that these changes did not:

- (i) increase the probability of occurrence or consequence of an accident or malfunction of equipment important to safety evaluated in the Safety Analysis Report since the installation of temporary level indication did not affect the operation of the chemical addition system; or,
- (ii) increase the possibility for an accident or malfunction of a different type than any evaluated previously in the Safety Analysis Report since the original function of the pneumatic tank level indication system was to measure the level of the boric acid in the BAAT and installation of the temporary system did not alter this function; or,
- (iii) reduce the margin of safety as defined in the basis of any Technical Specification since the margins of safety in the bases are related to the physical characteristics of the BAAT and do not reference a particular method of measuring the level.

Decrease ICS Automatic Reactor Demand High Limit for Three RCP Operation

This Temporary Modification (TM) adjusted the Integrated Control System (ICS) reactor demand signal limiter from 103% to 75% during a period of operation with three Reactor Coolant Pumps (RCPs). This allowed the limiter to prevent the ICS from automatically causing reactor power to exceed the high power trip setpoint of the Reactor Protection System (RPS). It also added a multimeter to monitor setpoint voltage.

It was determined that these changes did not:

- (i) increase the probability of occurrence or consequence of an accident or malfunction of equipment important to safety evaluated in the Safety Analysis Report since this modification served only to prevent ICS from inadvertently increasing the reactor power above the RPS trip or runback setpoints, and had no impact upon any safety related equipment; or,
- (ii) increase the possibility for an accident or malfunction of a different type than any evaluated previously in the Safety Analysis Report since the modification did not alter the purpose of the ICS reactor demand high limit, and did not degrade the function, performance, or reliability of any safety equipment; or,
- (iii) reduce the margin of safety as defined in the basis of any Technical Specification since the ICS automatic reactor demand high limit is not addressed in the Technical Specification bases.

Emergency Feedwater Steam Supply Valve Alignment

This Temporary Modification (TM) supplied Startup (SU) steam, via a 4" steam hose, to the K3 Emergency Feedwater (EFW) pump turbine for functional testing after installation of the new stainless steel rotating assembly. A modified flange was temporarily installed on the 6" tee off the EFW steam supply pipe. The steam hose was connected to the modified flange, routed through the abandoned EFW turbine overpressure relief exhaust stack, to the EFW pump room, and across the old SU boiler to the flange mounted on the spare SU steam header valve. After testing, the modified flange was removed and the original blind flange was replaced.

It was determined that these changes did not:

- (i) increase the probability of occurrence or consequence of an accident or malfunction of equipment important to safety evaluated in the Safety Analysis Report since EFW was not required to be operational when this TM was installed, and the system was returned to its typical configuration and alignment, and was tested to verify its design function before plant start-up was performed; or,
- (ii) increase the possibility for an accident or malfunction of a different type than any evaluated previously in the Safety Analysis Report since system piping was reassembled to its original configuration and the system was aligned in its normal operating mode prior to plant start-up; or,
- (iii) reduce the margin of safety as defined in the basis of any Technical Specification since there are no applicable margins of safety in the Technical Specification bases.

Connection of a Temporary Instrument Air Hose

This Temporary Modification (TM) provided an alternate connection to provide a source of Instrument Air for loads downstream of IA-1027 while the header upstream of IA-1027 was depressurized during repair of an Instrument Air elbow connection.

It was determined that these changes did not:

- (i) increase the probability of occurrence or consequence of an accident or malfunction of equipment important to safety evaluated in the Safety Analysis Report since, in the event of a loss of this alternate air supply, all air-operated valves assume a fail-safe position or retain the capability to be moved to a safety function position; or,
- (ii) increase the possibility for an accident or malfunction of a different type than any evaluated previously in the Safety Analysis Report since the alternate air supply did not cause the loads it served to operate differently; or,
- (iii) reduce the margin of safety as defined in the basis of any Technical Specification since the Instrument Air system is not defined in the Technical Specification bases.

SECTION IV

MISCELLANEOUS EVALUATIONS

Post-LOCA High Pressure Injection Pump Room Temperature
With No Room Cooling

This Calculation provides justification to show that room coolers are not required in the High Pressure Injection (HPI) Pump rooms in order for the pumps to remain operable.

Affected SAR Section: 9.7.2.1

It was determined that these changes did not:

- (i) increase the probability of occurrence or consequence of an accident or malfunction of equipment important to safety evaluated in the Safety Analysis Report since the room coolers are not accident initiators or mitigators, are not related to accident initiators; and have been proven by calculation not to affect the operability of safety-related equipment if they failed under accident conditions; or,
- (ii) increase the possibility for an accident or malfunction of a different type than any evaluated previously in the Safety Analysis Report since the passive function related to Service water system integrity is still required and assured, and flow to the pump coolers is still achieved by flow balance; or,
- (iii) reduce the margin of safety as defined in the basis of any Technical Specification since there are no Technical Specifications Bases with any relationship to the function of these room coolers once it had been shown that the pumps are still operable without functioning room coolers.

Reactor Building Polar Crane Engineered Heavy Load Lift

This Engineering Calculation provided the basis for a change in the requirements associated with an engineered special heavy lift. These changes incorporated an inspection before and after the lift above the rated capacity of the crane to assure that there were no structural concerns. The use of the special head lift and the resulting procedure changes were related to commitment concerns and were not safety related.

Affected SAR Section: 9.6.2.2

It was determined that these changes did not:

- (i) increase the probability of occurrence or consequence of an accident or malfunction of equipment important to safety evaluated in the Safety Analysis Report since the changes still comply with the assumptions for the heavy load drop evaluation, and the analyses associated with a heavy load drop over the reactor vessel indicate that the probability of a drop is low and that the 10CFR part 100 limits would not be exceeded; or,
- (ii) increase the possibility for an accident or malfunction of a different type than any evaluated previously in the Safety Analysis Report since no new load paths were created, and the evaluation was consistent with previous design, construction, and operating assumptions used to develop the postulated accidents addressed in the SAR; or,
- (iii) reduce the margin of safety as defined in the basis of any Technical Specification since no modifications were performed, and the qualifying heavy load drop evaluation and implications of the drop are not addressed in the Technical Specification bases.

Operation of the Unit 1 Main Chiller as a Contaminated System

The Unit 1 Main Chiller was found to contain Sodium-24, Cesium-134, and Cesium-137, and was subsequently evaluated in accordance with the requirements of I.E. Bulletin 80-10. This bulletin requires an immediate evaluation when a normally non-radioactive system becomes contaminated and cannot be decontaminated. The evaluation results indicated that the dose that would occur if the entire contents of the Main Chiller were released would be well below the 10CFR20 and Technical Specification limits.

It was determined that these changes did not:

- (i) increase the probability of occurrence or consequence of an accident or malfunction of equipment important to safety evaluated in the Safety Analysis Report since the Main Chiller was not considered an initiator or mitigator of an evaluated accident, the existing contamination did not affect the function of this system, and this condition did not impact equipment important to safety; or,
- (ii) increase the possibility for an accident or malfunction of a different type than any evaluated previously in the Safety Analysis Report since the consequences of releasing radioactivity contained in the Main Chiller to Lake Dardanelle was bounded by a previously evaluated accident and the activity in the chiller would not impact the function of equipment important to safety; or,
- (iii) reduce the margin of safety as defined in the basis of any Technical Specification since the dose associated with the potential release of the entire contents of the Main Chiller was well below the limits of 10CFR20 and the Technical Specifications.

Revision to Fire Water System Drawings to Reflect As-Built Configuration

These changes to the SARs were implemented to depict the correct configuration of the Fire Water system. No hardware changes were made to this system.

ANO-2 SAR Figure 9.5-1 was affected by these changes as well as the ANO-1 figure listed below.

Affected SAR Figure: 9-16

It was determined that these changes did not:

- (i) increase the probability of occurrence or consequence of an accident or malfunction of equipment important to safety evaluated in the Safety Analysis Report since no hardware changes were made and the system capability and reliability were not degraded; or,
- (ii) increase the possibility for an accident or malfunction of a different type than any evaluated previously in the Safety Analysis Report since the design, operation, and failure modes of this system were not affected by these changes; or,
- (iii) reduce the margin of safety as defined in the basis of any Technical Specification since the Technical Specifications do not specify a margin of safety with respect to the Fire Water system.

Removal of Spent Fuel Pool Skimming Filters from P&ID M-235 Sheet 1

The spent fuel pool skimmer piping was removed to provide clearance for the new high density spent fuel rack installation. This DRN removed the skimmer filters from the P&ID to show the as-built configuration of the plant.

Affected SAR Figure: 9-11

It was determined that these changes did not:

- (i) increase the probability of occurrence or consequence of an accident or malfunction of equipment important to safety evaluated in the Safety Analysis Report since the skimmer filters were never considered permanent plant equipment and were not addressed in any previously evaluated accidents; or,
- (ii) increase the possibility for an accident or malfunction of a different type than any evaluated previously in the Safety Analysis Report since the filters are part of a portable system that was designed only as an enhancement to the Spent Fuel System, and removal of the filter does not affect any safety related systems; or,
- (iii) reduce the margin of safety as defined in the basis of any Technical Specification since these components are not addressed in the Technical Specification bases.

Drawing Revision to Indicate that Screen Material at the Emergency Cooling
Pond Intake Pipe May Be Stainless Steel

The screens installed on the Emergency Cooling Pond (ECP) suction pipe have been verified to be stainless steel rather than 12 guage galvanized wire as previously noted on the drawing. The stainless steel screen performs the same function as the galvanized screen while providing improved corrosion resistance. This Drawing Revision Notice (DRN) revises the drawing to state that use of either material is acceptable for this application.

Affected SAR Figure: 9-34

It was determined that these changes did not:

- (i) increase the probability of occurrence or consequence of an accident or malfunction of equipment important to safety evaluated in the Safety Analysis Report since the stainless steel screen performs the same function as the galvanized screen by maintaining a 3/8" mesh opening while adding improved corrosion resistance; or,
- (ii) increase the possibility for an accident or malfunction of a different type than any evaluated previously in the Safety Analysis Report since the function of the ECP intake screens to remove foreign material larger than 3/8" is not altered by the change; or,
- (iii) reduce the margin of safety as defined in the basis of any Technical Specification since the type of ECP intake screen is not defined in the Technical Specification bases.

Condensate/Feedwater System Drawing Revision

This Drawing Revision Notice (DRN) corrected valve positions on the Condensate/Feedwater System piping and instrument diagram (P&ID) to reflect full power operation alignments. Corrections were also made regarding positions of sample system valves and isolation valves to the auxiliary feedwater pump recirculation line and feedwater long path clean-up lines. Corrections to as-built regarding reducers and pipe sizes were also made by this DRN.

Affected SAR Figure: 10-2

It was determined that these changes did not:

- (i) increase the probability of occurrence or consequence of an accident or malfunction of equipment important to safety evaluated in the Safety Analysis Report since the valves changed by this DRN are not initiators or mitigators of evaluated accidents, did not alter the off-site dose conditions, are not safety-related, and are physically isolated from any safety-related equipment, or;
- (ii) increase the possibility for an accident or malfunction of a different type than any evaluated previously in the Safety Analysis Report since failure of any affected components would not create any conditions beyond those bounded by existing analysis, and these changes did not create any new failure modes for safety-related equipment, or;
- (iii) reduce the margin of safety as defined in the basis of any Technical Specification since there are no defined margins of safety associated with or affected by the equipment changed.

Use of a Temporary Equipment Hatch Cover During the Unit 1 Refueling Outage

This Engineering Report provided the evaluation for the acceptability of the use of a Temporary Equipment Hatch Cover (TEHC) during Unit 1's twelfth refueling outage. The TEHC was a 3-piece assembly that was taken into the reactor building and assembled to provide closure of the equipment hatch. It had an integral door that could be readily opened and closed to provide personnel and equipment access while maintaining the ability for rapid closure. Flanged penetrations were provided for services.

Affected SAR Section: 5.2.2.1.3

It was determined that these changes did not:

- (i) increase the probability of occurrence or consequence of an accident or malfunction of equipment important to safety evaluated in the Safety Analysis Report since use of the TEHC did not affect fuel handling and meets the containment closure requirements, it did not increase the probability or consequences of a fuel handling accident; and restricted use of the TEHC only during outages resulted in no effect on the probability of a malfunction of equipment important to safety; or,
- (ii) increase the possibility for an accident or malfunction of a different type than any evaluated previously in the Safety Analysis Report since conditions remained the same as those which would have affected the normal hatch cover, and the possibility of releases due to containment failure resulting from the use of the TEHC during the outage were not significantly greater than the previous method of containment closure control; or,
- (iii) reduce the margin of safety as defined in the basis of any Technical Specification since the TEHC performed an identical function as the normal hatch cover, no margin of safety was affected.

Disposal of Spent Radioactive Resin

This Licensing Document Change revised the SAR to identify the waste handling equipment as permanent, and distinguished between this permanent equipment and the portable vendor equipment typically staged and operated in the west end of the trainbay. It also clarified the waste disposal systems as installed plant systems.

Affected SAR Sections: 11.1.3.3.5, 11.1.4

It was determined that these changes did not:

- (i) increase the probability of occurrence or consequence of an accident or malfunction of equipment important to safety evaluated in the Safety Analysis Report since the waste disposal system was not evaluated as an initiator or mitigator of an analyzed accident and does not interface with any equipment or systems important to safety; or,
- (ii) increase the possibility for an accident or malfunction of a different type than any evaluated previously in the Safety Analysis Report since only the location of waste disposal has changed and is not performed in the immediate vicinity of any equipment important to safety; or,
- (iii) reduce the margin of safety as defined in the basis of any Technical Specification since there are no applicable margins of safety defined in the Technical Specification bases.

Laundry Radioactive Waste System

These changes to the SARs revised the description of the Laundry Radioactive Waste System. Operation of this system, which was designed to process radioactive laundry, was discontinued due to limited processing capabilities during peak laundry usage periods. Laundry is currently processed by an authorized off-site facility. The capability to process radioactive laundry on-site, using portable equipment, is available as an alternative method of providing cleaned laundry.

Sections 9.4.2.3, 11.2.6.4.4, and 12.3.2.1 of the ANO-2 SAR were affected as well as the ANO-1 SAR sections listed below.

Affected SAR Sections: 11.1.3.1.3, 11.1.3.6, 11.2.6.2.1

It was determined that these changes did not:

- (i) increase the probability of occurrence or consequence of an accident or malfunction of equipment important to safety evaluated in the Safety Analysis Report since this system was not analyzed as an initiator, was not credited as an accident mitigator, and does not interface with any equipment important to safety; or,
- (ii) increase the possibility for an accident or malfunction of a different type than any evaluated previously in the Safety Analysis Report since this change only addressed the discontinued use of the laundry processing system and did not impact any equipment important to safety; or,
- (iii) reduce the margin of safety as defined in the basis of any Technical Specification since there are no margins of safety related to this process as defined in the Technical Specifications bases.

Clarification of Service Water Pump Submergence Data

These changes were made to reflect the different submergence and Net Positive Suction Head (NPSH) characteristics for the new Service Water (SW) pumps installed by Limited Change Package 92-5034. The pump design flow was listed as the reference flow, and the suction bell elevation was included for clarity.

Affected SAR Section: 9.3.2.1
 Table: 9-15

It was determined that these changes did not:

- (i) increase the probability of occurrence or consequence of an accident or malfunction of equipment important to safety evaluated in the Safety Analysis Report since the SW system is not considered an accident initiator, these changes did not adversely affect the mitigating function of the system, available submergence as clarified is adequate for all plant conditions, and no new failure modes of safety related equipment were introduced by this change; or,
- (ii) increase the possibility for an accident or malfunction of a different type than any evaluated previously in the Safety Analysis Report since the SW system is not considered an accident initiator, and no new failure modes were created; or,
- (iii) reduce the margin of safety as defined in the basis of any Technical Specification since there are no margins of safety affected by this change.

Correction to Main Steam Line Break Valve Analysis

This SAR Change corrected faulty Main Steam Line Break (MSLB) valve flow resistance modeling inputs to reflect results of the Cycle 12 MSLB reanalysis, and to bound actual plant conditions during a MSLB. Earlier inputs did not bound actual plant initial conditions regarding valve flow resistance.

Affected SAR Sections: 10.3, 14.2.2.1.3.4
 Table: 3A

It was determined that these changes did not:

- (i) increase the probability of occurrence or consequence of an accident or malfunction of equipment important to safety evaluated in the Safety Analysis Report since these changes did not relate to accident initiation, did not affect the operation of equipment important to safety, and the modified MSLB analysis remained bounded by existing accident analysis; or,
- (ii) increase the possibility for an accident or malfunction of a different type than any evaluated previously in the Safety Analysis Report since these changes were analytical in nature and did not affect the conditions under which equipment important to safety is operated; or,
- (iii) reduce the margin of safety as defined in the basis of any Technical Specification since there are no margins of safety defined in the Technical Specification bases that relate to any of these changes.

Corrections to the Cycle 13 Radiation Analysis

These changes to the Cycle 13 Radiation Analysis resulted from errors found in the Cycle 12 calculation of the 2 hour Exclusion Area Boundary (EAB) whole body dose for the fuel handling accident outside containment. These changes also corrected typographical errors found for the Control Rod Ejection Accident 2 hour thyroid dose and the Loss of Coolant Accident 2 hour whole body dose.

Affected SAR Table: 3A-7

It was determined that these changes did not:

- (i) increase the probability of occurrence or consequence of an accident or malfunction of equipment important to safety evaluated in the Safety Analysis Report since this change affected the documentation of accident analysis only, and any changes to dose were artificial since the values listed previously were in error; or,
- (ii) increase the possibility for an accident or malfunction of a different type than any evaluated previously in the Safety Analysis Report since no changes in the failure modes of the equipment important to safety were assumed in these analyses; or,
- (iii) reduce the margin of safety as defined in the basis of any Technical Specification since these analyses are not addressed in the Technical Specification bases.

Emergency Cooling Pond Inventory Loss Analysis

This change to the SAR added detail to the discussion of the Emergency Cooling Pond (ECP) inventory analysis, and to clearly state the various demands and sources of pond water that are included in that analysis. This change also indicated that operator action is credited in the inventory analysis during the transfer of the Service Water system to the pond.

Affected SAR Section: 9.3.2.4

It was determined that these changes did not:

- (i) increase the probability of occurrence or consequence of an accident or malfunction of equipment important to safety evaluated in the Safety Analysis Report since the ECP functions only as a passive mitigator, is not considered an accident initiator, and the changes did not impact equipment important to safety; or,
- (ii) increase the possibility for an accident or malfunction of a different type than any evaluated previously in the Safety Analysis Report since the changes related only to pond performance and not the function of the pond as a heat sink; or,
- (iii) reduce the margin of safety as defined in the basis of any Technical Specification since these changes specifically indicate the required amount of water to maintain pond availability for the required 30 day post-accident time frame, and the bases related to the ECP do not discuss a margin of safety related to maintaining pond initial conditions.

Emergency Cooling Pond Peak Temperature and Inventory Loss Analysis

This change to the SAR was made to reflect the analysis of Emergency Cooling Pond (ECP) response, consistent with Regulatory Guide 1.27, Revision 1, which utilized a computer model that had been benchmarked against an operating cooling pond to more accurately reflect pond behavior. This analysis yielded a much lower peak temperature of 120.8 F.

Affected SAR	Sections:	1.7.3, 9.12, 9.3.2.4, 9.7.2.1
	Figures:	9-22, 9-23, 9-24, 9-25, 9-26, 9-27, 9-28
	Table:	9-18

It was determined that these changes did not:

- (i) increase the probability of occurrence or consequence of an accident or malfunction of equipment important to safety evaluated in the Safety Analysis Report since the ECP serves only as a passive mitigator, is not considered an initiator of an analyzed accident, and the changes did not adversely impact equipment operation or introduce new failure modes of safety related equipment; or,
- (ii) increase the possibility for an accident or malfunction of a different type than any evaluated previously in the Safety Analysis Report since the changes relate to pond performance, and not the function of the pond, and did not create the possibility of a different type of accident or malfunction of equipment important to safety; or,
- (iii) reduce the margin of safety as defined in the basis of any Technical Specification since this change does not affect any margins of safety defined in the Technical Specification bases.

Piping Analysis Design Code Reconciliation

Engineering Report 94-R-0018-01 justified the use of sections of later ASME Code editions than those that were used during construction provided that they had been reconciled to the Code of Record. By virtue of the use of later ASME Codes for piping analysis that have been reconciled back to the unit's Code of Record, all of the original piping Code commitments have been either met or an equivalent level of confidence has been established that the system will function as designed.

ANO-2 SAR Affected Sections: 3.8.1.2.1, 3.9.2.3
Tables: 1.3-1, 1.7-3, 3.2-4

The affected SAR sections and tables listed below apply to ANO-1.

Affected SAR Sections: 14.2.2.1.1, 4.1.2.5.1, 4.1.3.2, 4.2.7, 4.3.12.1,
4.3.7, 5.2.5.2, 6.1.2.4.1, 6.2.2.4.1, 6.6.2.2,
9.2.2.3, A.7.1.19, A.7.1.2, A.7.2.19, A.7.3.19,
A.7.4.19, A.7.5.19, A.7.6
Tables: 1-1, 1-6, 11-16, 11-18, 11-19, 4-2

It was determined that these changes did not:

- (i) increase the probability of occurrence or consequence of an accident or malfunction of equipment important to safety evaluated in the Safety Analysis Report since use of a later ASME Code that had been reconciled to the Code of Record for piping analysis did not result in any physical modifications to the plant, and all of the original piping Code commitments have either been met or an equivalent level of confidence has been established through the reconciliation that systems will function as designed; or,
- (ii) increase the possibility for an accident or malfunction of a different type than any evaluated previously in the Safety Analysis Report since allowing the use of later sections of the ASME Code did not result in any physical plant modifications; or,
- (iii) reduce the margin of safety as defined in the basis of any Technical Specification since the Code to be used was required to be reconciled to the unit's Code of Record, and the affected portion of the bases need to be clarified to indicate the acceptability of the use of a reconciled Code edition.

Pressurizer Heater Supply Cubicle

This Licensing Document Change revised the statement concerning the pressurizer heater power supply requirements to more accurately express the intent of commitments made in response to NUREG-0578. The previous terminology did not denote the qualification requirements. These commitments intended that only Class 1E interfaces for main power and control power were to be protected by safety-grade circuit breakers.

Affected SAR Section: 8.3.1.1.4

It was determined that these changes did not:

- (i) increase the probability of occurrence or consequence of an accident or malfunction of equipment important to safety evaluated in the Safety Analysis Report since the pressurizer heaters are not credited as being either initiators or mitigators in any evaluated accidents, the Class 1E bus is still protected by a safety grade circuit breaker, and the rest of the circuit is considered non-safety related; or,
- (ii) increase the possibility for an accident or malfunction of a different type than any evaluated previously in the Safety Analysis Report since the circuit supplied Class 1E power to the pressurizer heaters as originally intended and the changes did not affect the way the circuit functions in the overall design of the plant; or,
- (iii) reduce the margin of safety as defined in the basis of any Technical Specification since the Class 1E bus was still isolated from the pressurizer heater circuit and the heaters still performed the same design function.

Shift Engineer/Shift Technical Advisor Training

These changes were made to reflect the requirements of NUREG-0737. The information contained in the deleted sections is maintained in site training procedures.

ANO-2 SAR Section 13.2.2.2.C was affected by these changes as well as the ANO-1 SAR section listed below.

Affected SAR Section: 12.2.2.2.C

It was determined that these changes did not:

- (i) increase the probability of occurrence or consequence of an accident or malfunction of equipment important to safety evaluated in the Safety Analysis Report since the Shift Technical Advisor (STA) function does not serve as an initiator and this individual's role in mitigating the malfunction, or the consequences of the malfunction, of equipment important to safety remains unchanged; or,
- (ii) increase the possibility for an accident or malfunction of a different type than any evaluated previously in the Safety Analysis Report since no aspect of this change is capable of initiating an event or condition that could lead to a potential malfunction of any safety related components; or,
- (iii) reduce the margin of safety as defined in the basis of any Technical Specification since there are no margins of safety associated with the STA function defined in the Technical Specifications bases.

Startup Accident and Rod Withdrawal Accident Analyses

This Licensing Document Change revised the stated initial subcritical analysis value for the Startup Accident from 1% to 0.5% delta k/k. The value of 0.5% was the actual assumed initial subcritical value used in the licensing analyses. The assumed value only establishes a computer code initialization point for the addition of reactivity by rod withdrawal. This minor change had no impact on the analysis results.

Affected SAR Sections: 14.1.2.2, 14.1.2.3
 Tables: 14-3, 14-5, 14-6

It was determined that these changes did not:

- (i) increase the probability of occurrence or consequence of an accident or malfunction of equipment important to safety evaluated in the Safety Analysis Report since this change did not affect any of the accident initiating or mitigating mechanisms for any analyzed event, did not introduce any new or different operating conditions, and did not make any changes in the assumptions concerning equipment availability or failure modes; or,
- (ii) increase the possibility for an accident or malfunction of a different type than any evaluated previously in the Safety Analysis Report since these changes did not require any changes to existing plant equipment, did not require any new plant equipment, and did not produce any new or different operating conditions; or,
- (iii) reduce the margin of safety as defined in the basis of any Technical Specification since there were no applicable margins of safety defined in the Technical Specifications bases.

Unit 1 Cycle 13 Core Operating Limits Report

The Unit 1 Core was refueled and the Core Operating Limits were revised to allow operation within the region of analysis.

Affected SAR	Sections:	3B, 3B FIG. LIST, 3B T.C.
	Figures:	3B-1A, 3B-1B, 3B-2A, 3B-2B, 3B-3A, 3B-3B, 3B-4, 3B-5, 3B-6, 3B-7A, 3B-7B, 3B-8, 3B-9
	Table:	3B

It was determined that these changes did not:

- (i) increase the probability of occurrence or consequence of an accident or malfunction of equipment important to safety evaluated in the Safety Analysis Report since no changes to the plant equipment or operating procedures were required for cycle 13, the cycle 13 specific parameters were bounded by those assumptions in the current licensed analyses, and no changes in the assumptions concerning equipment availability or failure modes were made; or,
- (ii) increase the possibility for an accident or malfunction of a different type than any evaluated previously in the Safety Analysis Report since there was no new equipment associated with the use of batch 15 fuel, these changes did not alter the way in which the plant operates, and no changes in the failure modes of equipment important to safety were assumed in the cycle 13 analyses; or,
- (iii) reduce the margin of safety as defined in the basis of any Technical Specification since the Operating Limits and Setpoints for cycle 13 operation assured that the plant would continue to operate within the bounds of the conditions for which it was analyzed.

Unit 1 Cycle 13 Reload Report

The Cycle 13 Reload Report discussed the effects of the changes in the new batch 15 fuel. The Cycle 13 Reload Analysis Report supported operation for 518 +10/-10 effective full power days, increased fuel enrichment to 4.06 wt% U-235, and modified the fuel mechanical design. The modifications to the fuel design included the use of different fuel rod upper plenum spring and upper and lower end caps, a skirtless lower end grid, and optimized flow guide tubes.

Affected SAR	Section:	3A
	Figure:	3A
	Table:	3A

It was determined that these changes did not:

- (i) increase the probability of occurrence or consequence of an accident or malfunction of equipment important to safety evaluated in the Safety Analysis Report since no changes to plant equipment or operating procedures were required for cycle 13, the cycle 13 specific parameters were bounded by those assumptions in the current licensed analyses, and no changes in the assumptions concerning equipment availability or failure modes were made; or,
- (ii) increase the possibility for an accident or malfunction of a different type than any evaluated previously in the Safety Analysis Report since there is no new equipment associated with the use of batch 15 fuel, these changes did not alter the way in which the plant operates, and no changes in the failure modes of equipment important to safety were assumed in the cycle 13 analyses; or,
- (iii) reduce the margin of safety as defined in the basis of any Technical Specification since the Operating Limits and Setpoints for Cycle 13 operation assured that the plant would continue to operate within the bounds of the condition for which it was analyzed.

Updated Bounding Analysis of the Moderator Dilution Accident

This change updated the analysis of the Moderator Dilution Accident (MDA) at power to accommodate increasing critical boron concentrations associated with extended burnup cycles. It also provided a better basis for the acceptability of the MDA during refueling.

Affected SAR Section: 14.1.2.4
 Tables: 14-7, 14-8

It was determined that these changes did not:

- (i) increase the probability of occurrence or consequence of an accident or malfunction of equipment important to safety evaluated in the Safety Analysis Report since the higher calculated peak power and pressure for each of the dilution flow rates were still well within the design overpower and code pressure limits established to assure that no fuel damage would occur and that the Reactor Coolant System (RCS) pressure boundary would not be degraded by this event, and this change did not require changes to plant equipment or produce any new operating conditions; or,
- (ii) increase the possibility for an accident or malfunction of a different type than any evaluated previously in the Safety Analysis Report since no changes in the assumptions concerning equipment failure modes were made; or,
- (iii) reduce the margin of safety as defined in the basis of any Technical Specification since the bases of the Technical Specifications do not define any margin of safety related to the MDA.

Technical Specification Bases Changes

These revisions to the Technical Specifications Bases distinguish between the two Departure from Nucleate Boiling Ratio limits, add additional information about the reactor power-imbalance envelope as defined in the Core Operating Limits Report, and add information concerning rod insertion times.

These changes affect TS Bases 3.1, 3.5.2.6, and 4.7

It was determined that these changes did not:

- (i) increase the probability of occurrence or consequence of an accident or malfunction of equipment important to safety evaluated in the Safety Analysis Report since these changes did not affect any of the accident initiating or mitigating mechanisms for any analyzed event, did not introduce any new or different operating conditions, and did not make any changes in the assumptions concerning equipment availability or failure modes; or,
- (ii) increase the possibility for an accident or malfunction of a different type than any evaluated previously in the Safety Analysis Report since these changes did not require any changes to existing plant equipment, did not require any new plant equipment, and did not produce any new or different operating conditions; or,
- (iii) reduce the margin of safety as defined in the basis of any Technical Specification since the additional information was added for clarification and explanation and did not affect any parameters that could be used to define margin.

Technical Specification Bases for TS 3.2

This Technical Specification Bases change revises wording concerning the Borated Water Storage Tank (BWST) volume that is required to borate the Reactor Coolant System (RCS) to a 1% subcritical margin in the cold condition to require only an operable BWST. Technical Specification (TS) 3.3.1.G defines the volume of an operable BWST.

This affected the bases for TS 3.2.

It was determined that these changes did not:

- (i) increase the probability of occurrence or consequence of an accident or malfunction of equipment important to safety evaluated in the Safety Analysis Report since this change did not affect the input, assumptions, or methodology used to perform any accident analysis and did not change the values of any parameters but only the way the parameters were described; or,
- (ii) increase the possibility for an accident or malfunction of a different type than any evaluated previously in the Safety Analysis Report since this change to the information stated in the TS bases was only a clarification and did not require any new equipment or alter the way existing equipment operates; or,
- (iii) reduce the margin of safety as defined in the basis of any Technical Specification since the change to TS 3.2 bases removed information that might have required revision due to cycle specific requirements and the BWST volume remained bounded by TS 3.3 bases.

ANO

QAMO

Interim Reporting Changes Due To General Manager Plant Operations Position
Opening

A change to the Quality Assurance Manual, Operations (QAMO) was required for changes to the reporting chain caused while the General Manager, Plant Operations, position remained unfilled.

It was determined that these changes did not:

- (i) increase the probability of occurrence or consequence of an accident or malfunction of equipment important to safety evaluated in the Safety Analysis Report since the changes were administrative in nature; or,
- (ii) increase the possibility for an accident or malfunction of a different type than any evaluated previously in the Safety Analysis Report since the changes made were administrative in nature and had no effect on any equipment or procedures; or,
- (iii) reduce the margin of safety as defined in the basis of any Technical Specification since this administrative change is not related to the margins of safety as defined in the bases of any technical specifications.

ANO

QAMO

Materials, Purchasing and Contracts Position Title Change: Supervisor,
Purchasing.

The Quality Assurance Manual, Operations (QAMO) was changed to eliminate the title and position of the Supervisor, Purchasing and assign the responsibilities of that function to the Manager, Materials, Purchasing and Contracts.

This change affected Section 1.3.3.1 of the QAMO.

It was determined that these changes did not:

- (i) increase the probability of occurrence or consequence of an accident or malfunction of equipment important to safety evaluated in the Safety Analysis Report since the change was administrative in nature and controls that were in place for the use of purchased material were not degraded; or,
- (ii) increase the possibility for an accident or malfunction of a different type than any evaluated previously in the Safety Analysis Report since no physical change to any equipment was made with this QAMO change; or,
- (iii) reduce the margin of safety as defined in the basis of any Technical Specification since this change did not impact plant configuration or operations and therefore did not affect any Technical Specification bases.

Clarified Description of the Reporting Relationship Between ANO Purchasing
and the Corporate Manager, Purchasing

The Quality Assurance Manual Operations (QAMO) was clarified to show the direct reporting relationship of ANO Purchasing to the Manager, Materials, Purchasing and Contracts, ANO, with a matrixed reporting relationship to the Corporate Manager, Purchasing. ANO Purchasing had previously been shown as reporting directly to the Corporate Manager, Purchasing.

This change affected section 1.4.2.4.1 and page F-1 of the Quality Assurance Manual Operations.

It was determined that these changes did not:

- (i) increase the probability of occurrence or consequence of an accident or malfunction of equipment important to safety evaluated in the Safety Analysis Report since the change did not degrade the controls in place for the use of purchased materials that could affect plant operations or the operation of equipment important to safety and did not affect systems or procedures used to mitigate the consequences of an accident; or,
- (ii) increase the possibility for an accident or malfunction of a different type than any evaluated previously in the Safety Analysis Report since no physical change to any installed plant equipment was made with this change; or,
- (iii) reduce the margin of safety as defined in the basis of any Technical Specification since this change did not affect any Technical Specification bases.

Headquarters Operations Support Organizational Change

The Quality Assurance Manual Operations (QAMO) was changed to reflect an organizational change within the Headquarters Operations Support Group which affected the responsibility for the Supplier Quality Assurance (QA) functions, some of which are performed on behalf of ANO. The responsibilities for the Headquarters QA program and internal audit functions were transferred to Central Licensing and the responsibility for the Supplier QA functions was reorganized to be under the Manager, Quality, who will now report to the V.P., Operations Support through the Director, Materials, Purchasing and Contracts. This change allowed the internal audit function to be organizationally independent of the areas audited and the Supplier QA group to be organizationally "in-line" as part of the procurement process.

This change affected page A-1, sections 1.4.2.1; 1.4.2.6; 2.3.3; 7.2.1; 7.2.2; 7.3.2; 7.3.3; 18.2.1; 18.3.3; 18.6; pages F-1 and T2-1 of the Quality Assurance Manual, Operations.

It was determined that these changes did not:

- (i) increase the probability of occurrence or consequence of an accident or malfunction of equipment important to safety evaluated in the Safety Analysis Report since the design and design bases of the plant were unaffected, and the current plant safety analysis remain complete and accurate; or,
- (ii) increase the possibility for an accident or malfunction of a different type than any evaluated previously in the Safety Analysis Report since there were no physical changes associated with this organizational change, and the plant conditions for which the design basis accidents have been performed remain valid; or,
- (iii) reduce the margin of safety as defined in the basis of any Technical Specification since this change did not affect any Technical Specification basis.

Revision to the Quality Assurance Manual Operations (QAMO)
Quality Assurance Matrix of Procedures

The Quality Assurance Manual Operations (QAMO) was changed to reflect the deletion of Procedure 5000.010, "Engineering Procedure Control." This procedure, and its reference in the QAMO Quality Assurance Matrix of Procedures, was deleted when it was determined that the administrative controls provided by 5000.010 were redundant to the controls provided in Procedure 1000.006, "Procedure Control."

This change affected Table 2

It was determined that these changes did not:

- (i) increase the probability of occurrence or consequence of an accident or malfunction of equipment important to safety evaluated in the Safety Analysis Report since this deletion is administrative in nature, and procedure control is maintained through the reference to procedure 1000.006; or,
- (ii) increase the possibility for an accident or malfunction of a different type than any evaluated previously in the Safety Analysis Report since this change is administrative in nature; or,
- (iii) reduce the margin of safety as defined in the basis of any Technical Specification since this change is administrative only, and does not affect any margins of safety as defined in the Technical Specification bases.

Quality Assurance Manual Operations (QAMO)

This revision to the QAMO deleted the requirement for Supplier Quality Assurance (QA) to distribute vendor audit reports to the ANO QA Supervisor. It added the requirement for the audit reports to be distributed to the Superintendant, Procurement Engineering, where the audit information can be used in developing appropriate procurement requirements.

This revision affected QAMO sections 18.4.5 and 18.6.

It was determined that these changes did not:

- (i) increase the probability of occurrence or consequence of an accident or malfunction of equipment important to safety evaluated in the Safety Analysis Report since the change did not affect plant equipment, its operation, or any plant system used to mitigate the consequences of an accident; or,
- (ii) increase the possibility for an accident or malfunction of a different type than any evaluated previously in the Safety Analysis Report since there is no relation to an accident associated with this change; or,
- (iii) reduce the margin of safety as defined in the basis of any Technical Specification since the change does not affect any Technical Specification basis.

Manager, Materials, Purchasing, and Contracts Position Reporting Change

The Quality Assurance Manual, Operations (QAMO) and the Emergency Plan (E-Plan) were changed to show the Manager, Materials, Purchasing and Contracts, reporting directly to the Director, Materials, Purchasing and Contracts, at Entergy Operations Incorporated headquarters.

This change affected Section 1.3.3, 1.4.2.4, Figure 1, and Figure 6 of the QAMO. E-Plan Figure B-1 was also affected by this change.

It was determined that these changes did not:

- (i) increase the probability of occurrence or consequence of an accident or malfunction of equipment important to safety evaluated in the Safety Analysis Report since the change was administrative in nature and controls that were in place for the use of purchased material were not degraded; or,
- (ii) increase the possibility for an accident or malfunction of a different type than any evaluated previously in the Safety Analysis Report since no physical change to any equipment was made with this QAMO/E-Plan change; or,
- (iii) reduce the margin of safety as defined in the basis of any Technical Specification since this change did not impact plant configuration or operations and therefore did not affect any Technical Specification bases.