

ATTACHMENT 2 TO C0799-08

DONALD C. COOK NUCLEAR PLANT

REPORT OF CHANGES, TESTS AND EXPERIMENTS PURSUANT  
TO 10 CFR 50.59(b) (2)

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I. INTRODUCTION

In accordance with the requirements of 10 CFR 50.59(b)(2), the following report contains a brief description of changes made to the Donald C. Cook Nuclear Power Plant (Cook), and summary of the associated safety evaluations for the period January 1, 1998 through January 22, 1999. This report also contains descriptions and summaries of several changes which were implemented subsequent to the January 22, 1999 cutoff date for the FSAR update, but which are included in the scope of UFSAR changes accompanying this report.

II. CHANGES, TESTS, AND EXPERIMENTS

The following report contains brief descriptions of physical changes made to the facility implemented under provisions of 10 CFR 50.59(b)(2) and summaries of the associated safety evaluations. This report is organized as follows:

- Facility Changes
- Procedure Changes
- Other Changes



Document No: 01-DCP-0301, Rev. 0

Title: Installation of Flat Target Nest Assemblies At Each Steam Generator

*Description of Change:*

This design change installed a maximum number of 10 laser target nest assemblies at each steam generator location in the Unit 1 Lower Containment in preparation for the upcoming Unit 1 Steam Generator Replacement Project (U1SGRP). The laser targets will serve as benchmark reference points for existing piping and equipment, allowing for later precision fit-ups when these items are reinstalled as part of the steam generator replacement. The laser targets were seismically mounted to concrete walls or structural steel and all targets are installed below the level of lower lateral restraint of the steam generators. Each target nest assembly is 2 1/4" in diameter by 3/4" thick and weighs 5.7 ounces.

*SE Summary:*

This change was reviewed and determined not to constitute an unreviewed safety question. This design change installed laser target nest assemblies in the Unit 1 Lower Containment below the lateral restraints of each of the steam generators. These laser targets will allow for precision fit ups for piping and equipment being removed and, then, reinstalled during the U1SGRP in the year 2000. The target nest assemblies were installed in accordance with Seismic Class I criteria. This change does not increase the probability or consequence of an accident that was previously analyzed in the UFSAR, nor create an accident of a different type. This change does not impact any Technical Specifications, any equipment important to safety, or the health and safety of the general public.

Document No: 01-DCP-0842

Title: Replacement of Remote Frequency Meter for Unit 1 Emergency Diesel Generator 1AB

*Description of Change:*

The scope of this TM was to replace the Unit 1 Emergency Diesel Generator 1AB remote frequency meter with a new frequency meter having similar characteristics. This frequency meter monitors output frequency of the emergency diesel generator for synchronization with offsite power during periodic load testing and recovery from an emergency operation.

*SE Summary:*

This change was reviewed and determined not to constitute an unreviewed safety question. It was determined that replacing the Unit 1 Emergency Diesel Generator 1AB remote frequency meter with a new frequency meter having similar characteristics would not adversely affect the plant's operating licenses, technical specifications, environmental technical specifications, EP, MASP, or the safety function requirements of any system. It was further determined the change would not create any new accident initiators or affect the operation equipment relied upon to prevent or mitigate the consequences of an accident. This change does not represent a hazard to the public health and safety.

Document No: 01-DCP-0873

Title: Replace Roller Lever on Containment Air Recirculation/Hydrogen  
Skimmer Fan Backdraft Damper Limit Switch

*Description of Change:*

This design change replaced the existing roller lever on the limit switch installed on each Containment Air Recirculation/Hydrogen Skimmer fan backdraft damper with a longer roller lever and relocated the limit switch to the opposite side of its mounting bracket to maintain proper alignment between the roller lever and the damper axle limit switch actuating arm.

*SE Summary:*

This change was reviewed and determined not to constitute an unreviewed safety question. This activity replaced the existing roller lever on the limit switch installed on each Containment Air Recirculation/Hydrogen Skimmer fan backdraft damper with a longer roller lever and relocated the limit switch to the opposite side of its mounting bracket to maintain proper alignment between the roller lever and the damper axle limit switch actuating arm. The Containment Air Recirculation/Hydrogen Skimmer System is not an initiator of any accident described in the UFSAR; it is only utilized to mitigate the consequences of accidents. This change will not impair the ability of the system to perform its accident mitigating functions and will have no impact on any other system involved in the mitigation of accidents. The limit switch merely provides indication that the backdraft damper is in its closed position.

Document No: 02-DCP-0871, Rev. 0

Title: Restore 5 Pressurizer Heaters that were Previously Disconnected

*Description of Change:*

This Design Package restored 5 Pressurizer Heaters that were previously disconnected due to grounds. Further reviews revealed that the pressurizer heaters were in fact not defective. Technical Specification 3.4.4 requires that the pressurizer be operable with at least 150kW of heating capacity. This Design Change Package increased the heating capacity for the pressurizers bringing them within their original design. The pressurizer heaters are used to restore RCS pressure in the event of a pressure transient.

*SE Summary:*

This change was reviewed and determined not to constitute an unreviewed safety question. No credit is taken for pressurizer heaters in the mitigation of design bases accidents. The restoration of the 5 pressurizer heaters will increase the heating capacity of the pressurizers within their original design, increasing the capability to restore RCS pressure in the event of a pressure transient. This change does not increase the probability or consequence of an accident that was previously analyzed in the UFSAR, or create an accident of a different type. This change does not impact any Technical Specifications, any equipment important to safety or the health and safety of the general public.

*Document No:* 12-DCP-0044, Rev. 1

*Title:* Miscellaneous Sealing and Cooling Water (MSCW) Filter Installation and Strainer Replacement

*Description of Change:*

The design change revision replaced the existing Miscellaneous Sealing and Cooling Water (MSCW) filter backwash mechanisms with retrofitted models. The existing routing of the filters backwash lines to the turbine room sump emergency overflow pipe are not impacted.

*SE Summary:*

The change was reviewed and determined not to constitute an unreviewed safety question. This design improves the performance of the non-safety related, seismic class III, balance of plant Miscellaneous Sealing and Cooling Water system filters. This modification does not change the function or design basis of any structure, system or component important to safety as described in the UFSAR. The function of the Miscellaneous Sealing and Cooling Water system is not referenced in the Technical Specifications. None of the equipment that the MSCW services is relied upon for any Technical Specification adherence.

*Document No:* 12-DCP-0053

*Title:* Ladder Extension on top of Reactor Cavity Pit

*Description of Change:*

This design change added a manufactured retractable ladder extension to the Reactor Cavity Pit access ladder in Units 1 and 2. The ladder is made of high strength steel with hot dip galvanized coating and is bolted to the existing ladder. This modification was made to alleviate a personnel safety concern.

*SE Summary:*

This change was reviewed and determined not to constitute an unreviewed safety question. The addition of a retractable ladder extension to provide a grab point above the grating hatch for personnel use, is an enhancement for personnel safety. There was no UFSAR impact, as the RCP ladder and the grating are not described in the UFSAR. This change was determined to have no affect on the plant Emergency Plan, or to the Security Plan. This design change did not represent a hazard to the public health and safety and did not affect any Technical Specifications. Therefore, this change was determined not to constitute an unreviewed safety question.

*Document No:* 12-DCP-0057

*Title:* Rewire Power Supply Inputs to the Reactor Protection Set (RPS)  
Cabinets

*Description of Change:*

Per this DCP, the electric supplies to the SSPS DC power supplies were taken from a point electrically upstream of the 15-ampere fuse. This modification ensures that opening of the fuse, because of faults in the non-class 1B circuits, does not cause a loss of power to the class 1E DC power supplies. Also, the rating of this 15-ampere fuse is changed to 8-ampere and complete coordination is ensured between this fuse and breaker in the upstream CRID distribution panel. All the modifications were carried out inside the RPS cabinets.

*SE Summary:*

The change was reviewed and determined not to constitute an unreviewed safety question. It was determined that the proposed modification of power supply input to RPS cabinets would not affect function of any equipment for Protection System, and Engineered Safety Features Instrumentation as described in the UFSAR. Evaluation of this modification determined that installation could be carried out inside the RPS cabinets without interfering with the function of any other equipment described in the UFSAR. Therefore, it was determined that this design change would not increase the probability of occurrence of a malfunction of equipment important to safety previously evaluated in the UFSAR.

*Document No:* 12-DCP-0075

*Title:* Retention of TUBELOX scaffolding in the Containment

*Description of Change:*

12-DCP-0075 allowed retaining TUBELOX scaffold frames at the Pressurizer Relief Tank (PRT) and at the bottom of the Steam Generators (SG) in Unit 1 & 2 lower containment during power operations. The scaffold frames were anchored as necessary to preclude frame components from becoming secondary missiles (capable of damaging safety related equipment needed to bring the plant to a safe shutdown) if impinged upon by jets of water/steam from a nearby high energy line break.

*SE Summary:*

The change was reviewed and determined not to constitute an unreviewed safety question. Analysis determined that the stress levels for the TUBELOX are within vendor allowable limits. This change did not require a change to the operating license, technical specifications or any licensing commitments. It was determined that the change would not adversely impact or interfere with the function of equipment important to safety. Therefore, the implementation of this design change did not constitute an unreviewed safety question.





*Document No:* 12-DCP-0085

*Title:* Modify Control Circuitry for Control Rod Drive Motor Generator Set

*Description of Change:*

12-DCP-0085 modified the control circuitry for the Control Rod Drive Motor Generator (CRDMG) Sets. This change included replacement of both over-excitation and over-voltage relays, installation of a shunt and analog panel indicator, increasing the size of the droop resistor in the voltage regulator circuit, and start-up tuning of the voltage regulators. The modifications were performed to improve the reliability of the CRDMG sets and permit the operators better maintain a balance between the voltage regulators in each unit.

*SE Summary:*

This change was reviewed and determined not to constitute an unreviewed safety question. Installation of this modification was considered non-safety related. The changes to the non-safety related control circuitry for the CRDMG sets did not constitute a change to the operating license, the technical specifications, or license commitments. No new accident initiators were created and the consequences of an accident or malfunction of equipment previously evaluated in the UFSAR are not increased.

*Document No:* 12-DCP-0122

*Title:* Install Pressure Tap Valves and Piping on the Inlet of Main Condenser Halves and Feed Pump Turbine Condenser Halves

*Description of Change:*

12-DCP-0122 installed pressure tap valves and piping on the inlet of all twelve main condenser halves and the four feed pump turbine condenser halves in both units. The purpose of this change was to provide a more efficient means of leak testing condenser tubes while the condensers are in operation. The addition of the valves allows gross leak testing to be performed on main condensers and feed pump turbine condensers with the condensers in service.

*SE Summary:*

This change was reviewed and determined not to constitute an unreviewed safety question. The piping modification performed under this DCP included installation of 1/2" diameter pipe stubs and valves in the 78" dia. inlet pipe to the main condensers near the existing instrumentation and sampling connections. The purpose of the stubs is to allow the injection of a tracer gas on the tube side of the condenser which can be detected on the shell side if there is a leak. The changes to the non-safety related condensers did not constitute a change to the operating license, the technical specifications, or license commitments. No new accident initiators were created and the consequences of an accident or malfunction of equipment previously evaluated in the UFSAR were not increased.

**Document No:** 12-DCP-0133

**Title:** Remove Braking Mechanisms on Motor-Operated Valves per NRC  
Information 93-98

**Description of Change:**

12-DCP-0133 removed braking mechanisms on Motor Operated Valves (MOV) in accordance with recommendations provided in NRC Information Notice 93-98. Diagnostics measuring valve thrust on the basis of actual operating system conditions, the questionable ability of the motor brakes to limit inertia, and the possible safety concern of brake engaging under degraded voltage conditions justified removal of the actuator motor brakes on the affected MOVs.

**SE Summary:**

The change was reviewed and determined not to constitute an unreviewed safety question. The changes to the MOVs did not constitute a change to the operating license, the technical specifications, or license commitments. No new accident initiators were created and the consequences of an accident or malfunction of equipment previously evaluated in the UFSAR were not increased.

**Document No:** 12-DCP-0174

**Title:** Increase of the Design Basis Lake Water Temperature for Modes 5  
and 6

**Description of Change:**

During the 1997 NRC Architect and Engineering (AE) Inspection, it was identified that the UFSAR assumes that the maximum lake water temperature is 76°F. The lake water temperature routinely exceeds this value, and can conservatively reach a temperature of 87.5° F. This design basis lake temperature value effects all systems that are impacted by lake water, with the Essential Service Water (ESW), the Component Cooling Water (CCW) and Non-Essential Service Water (NESW) most significantly impacted. The scope of 12-DCP-174, Rev. 0 will evaluate the operation of the plant in Modes 5 and 6 with the lake water temperature in excess of 76°F, to ensure that the design basis of the required ESW, CCW and NESW systems is not compromised. The results of this DCP will be applicable for the summer of 1998, while both units are in the forced outage.

**SE Summary:**

The change was reviewed and determined not to constitute an unreviewed safety question. The results of the safety evaluation demonstrated that no unreviewed safety questions exist due to the increase in the design basis lake water temperature from 76°F to 87.5°F while the units are in Modes 5 or 6. The only accidents previously evaluated in the UFSAR while the units are in Modes 5 or 6 are the Boron Dilution accident and Fuel handling accident. The increase in the design basis lake water temperature will not increase the probability of one of these two accidents from occurring. The ESW, NESW and CCW are not relied upon for the mitigation of either of the two mentioned accidents. No new radiological hazards will be created due to the implementation of this DCP, since the increased ESW temperature will not degrade its ability to cool safety related components to acceptable limits. The increase in lake water temperature will not cause any equipment important to safety to fail in a more severe manner than previously analyzed.



Document No: 12-DCP-0195, Rev. 0

Title: Convert VCT Valves Limitorque Actuators Type

**Description of Change:**

This DCP converted Limitorque actuators of the Unit 1&2 Volume Control Tank outlet valves QMO-451,452 from type SMB-00 to SB-00. The conversion kits are light thrust compensators to minimize inertia and are specifically manufactured by Limitorque for this kind of conversion. This conversion ensures remote opening of these valves during accident conditions, thus enhancing their functionalities. The change was purely mechanical and was confined to the actuator without affecting piping system or electrical operation of the valves. This change was made to address valve capability in accordance with the Generic Letter 89-10 MOV program.

**SE Summary:**

The change was reviewed and determined not to constitute an unreviewed safety question. Functionality was enhanced but there was no change to the electrical operation of the valves or performance of any equipment or the piping systems. This design change does not adversely affect the performance of the CVCS or any equipment whose malfunction is postulated in the UFSAR to initiate an accident or prevent an accident. This design change does not adversely affect the performance of any system, structure or component that functions to mitigate the consequences of an accident, to contain or detect the release of radioactivity or to provide post-accident shielding. Addition of the springs, directly or indirectly, will not adversely impact, or interfere with the function of any equipment important to safety. No new credible hazard is created that can be postulated to cause an accident different than those previously analyzed. No new credible failure mode is created that can be postulated to cause malfunction of equipment important to safety different than those previously analyzed. There will be no effect on the section 3/4.1.2, Boration Systems, of the Technical Specifications. Addition of the springs does not impact any safety limits and limiting safety system settings.



Document No: 12-DCP-0279, Rev. 0

Title: Replace Air Hose for PORVs 1-NRV-152 and 1-NRV-153

*Description of Change:*

This DCP allowed the use of either 3/8" or the existing 1/2" pneumatic air supply hose associated with the pressurizer power operated relief valves (PORVs) 1-NRV-152 and 1-NRV-153 to ensure their stroke times remain within established limits. Surveillance testing of the Unit 1 PORV 1-NRV-152 determined that it was stroking closed too quickly. The closure time is important because it is an input in the determination of the undershoot or the RCS pressure during a mass injection or heat addition type of an event in the Low Temperature Overpressure Protection (LTOP) analysis and to ensure the backup air supply cylinder provides 10 minutes of air supply without operator action. The decreasing of the supply air hose from 1/2" to 3/8" will allow the PORVs to stroke closed within required limits.

*SE Summary:*

The change was reviewed and determined not to constitute an unreviewed safety question. It was concluded that the design change to allow 3/8" or 1/2" diameter air hose upstream of PORVs 1-NRV-152 and 1-NRV-153 would not decrease the reliability of the PORVs in performing their relief function or prevent the PORVs from performing their intended safety function. This design change allows the PORVs to stroke closed at a satisfactory rate (within LTOP limit range and backup air supply consumption rates). No UFSAR or Technical Specification changes were required because of the implementation of this DCP. It was determined that this change would not increase the probability or consequences of any accident previously evaluated in the UFSAR or impact plant Technical Specifications or the health and safety of the public.

Document No: 12-DCP-0823

Title: Replace Existing Control Room Doors with New Equivalent Doors

*Description of Change:*

This DCP replaced the existing Control Room doors with new equivalent doors to eliminate burdensome recurring maintenance.

*SE Summary:*

This change was reviewed and determined to not constitute an unreviewed safety question. It was concluded that replacing these doors would not adversely affect the plant's operating licenses, technical specifications, environmental technical specifications, EP, security plan, or the safety function requirements of the control room doors. It was determined that this change would not create any new accident initiators or affect the operation equipment relied upon to prevent or mitigate the consequences of an accident. This change does not represent a hazard to the public health and safety.

**Document No:** 12-DCP-0831

**Title:** Modification to Provide Cooling to the Pit Side Control Cabinet  
for the Fuel Transfer System

**Description of Change:**

This design change provided cooling to the pit side control cabinet for the Fuel Transfer System cart winch. The cabinets are non safety-related but are required to be mounted seismic class 1.

**SE Summary:**

This change was reviewed and determined not to constitute an unreviewed safety question. This modification of the Pit Side Control Cabinet for the Fuel Transfer System did not involve fuel transfer mechanisms, fuel transfer paths, equipment interlocks or other operational attributes of the system. It was determined that this modification would not adversely affect the plant's operating licenses, technical specifications, environmental technical specifications, EP, security plan, or the safety function requirements of any system. The change will have no effect on potential uses and functions of the system other than providing cooling to the fuel handling system controls thus increasing its reliability. The change will not create any new accident initiators or affect the operation of equipment relied upon to prevent or mitigate the consequences of an accident. This change does not represent a hazard to the public health and safety.

**Document No:** 12-DCP-0835

**Title:** Replace Control Room Liquid Chiller Safety Valves 1-SV-94N, 1-SV-94S and 2-SV-94S

**Description of Change:**

This proposed design Change 12-DCP-0835 replaced the non-safety related and seismic class III safety relief valves 1-SV-94N, 1-SV-94S and 2-SV-94S with valves of a higher quality from a different manufacturer. The valves are located on the non-safety related and seismic class III portion of the Control Room Liquid Chiller Packages for each Unit. The set point for the new relief valves did not change.

**SE Summary:**

The change was reviewed and determined not to constitute an unreviewed safety question. The previously installed safety relief valves were obsolete and have no replacement parts. The replacement valves are of higher quality than the previously installed safety relief valves. The weight of the new valves are approximately the same as the existing valves. The change enhanced the design, functionality and operation of the Control Room Air Conditioning Liquid Chiller Package. Therefore, it was concluded that the design change would not affect accidents or their consequences evaluated in the UFSAR. The change would not adversely affect the plant's Operating Licenses, Technical Specifications or UFSAR. Therefore, it was concluded that the implementation of these replacement valves would not represent an unreviewed safety question.





**Document No:** 12-DCP-0848 Rev. 0

**Title:** Replacement of 12-WMO-30, (Roller Gate Valve) on the Circulating Water Intake Crib

**Description of Change:**

This DCP replaced the failed valve rails with a new vertical track system fabricated out of welded steel plates and tubes, inserted in the track slot underwater, and attached to the existing embedded steel channel. The replacement track will allow 12-WMO-30 to operate as intended.

**SE Summary:**

This change was reviewed and determined not to constitute an unreviewed safety question. The new design and the installation work will not degrade the seismic class I structure. The work was performed upstream of the traveling water screens, under conditions of low water velocity, thereby ensuring that the ESW pumps did not draw in debris which could cause pump damage or malfunction. Therefore, it was determined that this DCP would not increase the probability of an accident previously evaluated in the UFSAR. It was further determined that this modification would not adversely affect the plant's operating licenses, technical specifications, environmental technical specifications, EP, security plan, or the safety function requirements of any system. The change would not create any new accident initiators or affect the operation of equipment relied upon to prevent or mitigate the consequences of an accident. This change did not represent hazard to the public health and safety.

**Document No:** 12-DCP-0854

**Title:** Modification of Containment Control Air Headers in Lower Containment Annulus

**Description of Change:**

This DCP modified the containment control air headers in each units lower containment annulus. The safety relief valves were relocated in order to ensure protection of equipment from potential over pressurization. The protected equipment involves safety related air operated valves.

**SE Summary:**

This change was reviewed and determined not to constitute an unreviewed safety question. Relocation of the safety relief valves on the containment control air headers to prevent overpressurization allows for a less restrictive flow path downstream of the pressure regulator valves. It was determined that this modification would not adversely affect the plant's operating licenses, technical specifications, environmental technical specifications, EP, security plan, or the safety function requirements of any system. The change has no effect on potential uses and functions of the non safety related seismic class III control air system. It was further determined that this change would not create any new accident initiators or affect the operation of equipment relied upon to prevent or mitigate the consequences of an accident. This change did not represent a hazard to the public health and safety.

Document No: 12-DCP-0854, Rev. 2

Title: Relocate Redundant Safety Relief Valves on Containment Control Air Headers

*Description of Change:*

Design Change Package 12-DCP-0854, Rev. 2 relocated the existing redundant safety relief valves in the Containment Control Air System to a position downstream of the pressure regulators which are located in the containment annulus for both units. This was done to prevent a header over pressurization event due to a failed pressure regulator.

*SE Summary:*

This Change was reviewed and determined not to constitute an unreviewed safety question. The change and relief valves were evaluated for consequential effects on the air operated equipment and the containment. Loss of control air has been postulated for all air operated safety related equipment in containment and bounds 12-DCP-0854. The Safety Evaluation also addressed the potential release of air in containment through the safety relief valves and determined the postulated release was within existing parameters and Technical Specifications.

Document No: 12-DCP-0867, Rev. 0

Title: Recirculation Sump Vent Line Extension

*Description of Change:*

AEP:NRC:00110, dated December 29, 1979, AEP addressed the extension of the 6-inch diameter recirculation sump vent to elevation 613 feet - 0 inches. The purpose was to extend the vent line beyond the maximum water elevations to avoid water flow through the vent pipe on both units. However, a new calculation was performed and determined that maximum water elevation may exceed elevation 613 feet - 0 inches. This Design Change Package extends the vent line by 12 inches to elevation 614 feet - 0 inches. The 12 inch long spool piece was be flanged and bolted to the existing vent line flange. The addition of this spool piece is qualified for seismic and jet impingement loads.

*SE Summary:*

This change was reviewed and determined not to constitute an unreviewed safety question. This activity extended the vent line by 12 inches in order to extend the vent line beyond the maximum water elevations for the Recirculation Sump. This change does not increase the probability or consequence of an accident that was previously analyzed in the UFSAR, nor create an accident of a different type. This activity does not impact any Technical Specifications, any equipment important to safety or the health and safety of the general public.



Document No: 12-DCP-0869

Title: Install Coarse and Fine Screens on Face of the Containment  
Recirculation Sumps

*Description of Change:*

12-DCP-0869 restored the containment recirculation sump screens to their original configuration. The original design had been modified under 12-RFC-2361. However, based on sump issues identified during the 1997 A/E inspection, 12-DCP-0864 was initiated to restore the screen assemblies to their initial design.

*SE Summary:*

The change has been reviewed and determined not to constitute an unreviewed safety question. The work performed under this DCP replaced the existing galvanized steel wire mesh, located at the entrance of the recirculation sump, with the originally specified stainless steel wire mesh. This DCP does not affect the analysis performed for the recirculation sump. There was no impact on the Operating License, Technical Specification, or Licensing Commitment. This DCP does not have any other effect on the operating license or licensing commitment. No new accident initiators were created.

Document No: 12-DCP-0876

Title: Increase Size of Branch Duct in the Hydrogen Skimmer System  
Serving the Pressurizer Doghouse

*Description of Change:*

This DCP modified the branch duct in the Hydrogen Skimmer System serving the pressurizer doghouse to increase its size from 6-inch diameter to 8-inch diameter on both unit 1 and 2.

*SE Summary:*

This change was reviewed and determined not to constitute an unreviewed safety question. The Containment Air Recirculation/Hydrogen Skimmer System is not the initiator of any accident described in the UFSAR; therefore, the design change does not increase the probability of occurrence of an accident previously evaluated in the UFSAR. This DCP did not impair the ability of the Containment Air Recirculation/Hydrogen Skimmer System to perform its accident mitigating functions, nor impact any other system involved in the mitigation of accidents. Therefore, it was determined that this design change would not increase the consequences of an accident previously evaluated in the UFSAR. The duct that was modified is a static component which does not interface with or impact any operating equipment. Therefore, the design change does not increase the probability of an occurrence of a malfunction of equipment important to safety previously evaluated in the UFSAR. A malfunction of the containment Air Recirculation/Hydrogen Skimmer System would have the same consequences whether or not this modification were installed, i.e., the affected train would not be able to perform its mitigating function. Therefore, the evaluation concluded that the design change would not increase the consequences of a malfunction of equipment important to safety previously evaluated in the UFSAR.



*Document No:* 12-DCP-0878

*Title:* Installation of Safety Cables for Auxiliary and Turbine Building Cranes

*Description of Change:*

Design Change 12-DCP-0878 installed personnel safety cables in both the Auxiliary and Turbine Building crane bays. In the Auxiliary Building crane bay, two wire rope safety cables were installed for fall protection along the entire length of both the north and south crane-way girders above Floor Elevation 650'-0". Similarly in the Turbine Building crane bay, above operating Floor Elevation 633'-0," two wire rope safety cables were installed for fall protection along the entire length of the west crane-way girders for both the Main Turbine Crane and the two Auxiliary Cranes.

*SE Summary:*

The change was reviewed and determined not to constitute an unreviewed safety question. The personnel safety cables installed in both the Auxiliary and Turbine Building crane bays have no nuclear safety function. In the Auxiliary Building the safety cables are mounted to preserve the seismic design basis and preclude missile generation. If a cable should break and fall into the spent fuel pool, the impact to the fuel racks will be minimal. The worst case scenario would have 87 feet of cable fall into the spent fuel pool and come to rest on top of the fuel racks. The potential impact energy imparted by the entire 87-foot length of cable is less than limit specified in Section 9.7-29 of the UFSAR for objects being dropped into the spent fuel pool.

*Document No:* 12-DCP-0881

*Title:* "Accept-as-is" the as-found liner plate wall thickness

*Description of Change:*

This design change accepted-as-is, after performing an engineering evaluation, the as-found containment liner plate thickness and refilled the existing gap between the liner plate and the concrete floor with procedurally approved material on Units 1 and 2. Also, the unpainted liner surface was painted with approved paint.

*SE Summary:*

The change was reviewed and determined not to constitute an unreviewed safety question. An engineering evaluation confirmed the acceptability of containment liner minimum thickness less than 3/8". An approved sealant was applied at floor grade between the steel liner and the concrete floor. This change refilled the existing gap between the liner plate and the concrete floor with procedurally approved material and allowed painting of the unpainted liner surface with approved paint. The liner is a passive component and has no role in initiating an accident. The design change does not adversely interact with or impact any equipment important to safety.





**Document No:** 12-DCP-0886

**Title:** Install Screen Assembly on 8-Inch Pipe Between Recirculation Sump and Lower Containment Sump

**Description of Change:**

The design change installed a screen assembly on the 8" pipe inside the Recirculation Sump (RS) on units 1 and 2. The 8" pipe interconnects the Lower Containment Sump (CS) and the RS. The screen is designed to prevent particulate larger than 1/4" size from entering the RS from CS. The screen is held by a mounting plate assembly, which will be anchored to the RS.

**SE Summary:**

The change was reviewed and determined not to constitute an unreviewed safety question. The design change was initiated to comply with the UFSAR 6.3-10 statement relative to particulate size. The installed screen removes the possibility that currently existed for debris larger than 1/4" size to flow into the Recirculation Sump. Design and installation were in compliance with the Seismic Class I requirements which assure the screen will remain in place during potential seismic events, thereby precluding safety-related structures, systems, or components impact. This passive component (screen assembly) cannot initiate any accident by itself and has no adverse impact on the safety related Recirculation Sump. The Recirculation Sump and its associated components as well as this design change are designed for the mitigation of accidents and are not accident initiators for any design basis accidents.

**Document No:** 12-DCP-0888

**Title:** Reconfigure Glycol Header Piping Configuration

**Description of Change:**

This modification reconfigured the glycol headers on both units to the current UFSAR configuration. The permanent piping changes add some operational flexibility, but essentially do not change the way the refrigeration system is operated or the way that the ice condenser performs. The temporary piping was only be installed when both units are in mode 5 or mode 6.

**SE Summary:**

The change was reviewed and determined not to constitute an unreviewed safety question. The ice condenser refrigeration system is not an initiator of design basis accidents. In addition, both units were required to be in modes 5 or 6 for the temporary portion of this modification to be installed or remain installed. The piping is of the same specified material and is designed to the designated seismic class II criteria. Since the temporary system can only be installed and operated when both units are in mode 5 or 6, it is not possible for the heaters to melt ice that is needed to mitigate an accident. It was determined that the ice condenser system would continue to be operated within the design basis limits as described in the UFSAR, and the modification did not impact any Technical Specification.

Document No: 12-DCP-0890, Rev. 0

**Title:** Addition of Vents and Piping Downstream of RHR to Centrifugal Charging Pump and SI Pump Suction Header Isolation Valve (1&2-IMO-340)

**Description of Change:**

This modification installed a 3/4" vent valve for each unit's east RHR to Centrifugal Charging Pump (CCP) and SI Pump suction header isolation valve (1&2-IMO-340). The leak detection enclosure surrounding these RHR valves and structural grating above the RHR piping were also modified in order to accommodate the new vent and piping assemblies. Also, several electrical conduits which are currently routed above the leak detection enclosures are re-routed in order to gain access to the top of the enclosures. These events were installed to address trapped air identified in this piping.

**SE Summary:**

The change was reviewed and determined not to constitute an unreviewed safety question. The modification to the structural grating and the modification to the leak detection enclosure for 1&2-IMO-340 does not increase the probability of an accident initiation. The design change enhances the design, functionality and performance of this portion of the ECCS and does not adversely impact the functionality or quality of the relocated cables. This change facilitates the effective venting of gases that may collect during an outage in these lines in order to prevent the cavitation and damage to the CCP and SI pumps. Furthermore, the design and modification of piping and the valve's leak detection enclosure is performed in accordance with applicable plant procedures and industry standards so as to not degrade the design basis of the system. The availability of the ECCS to perform its safety function is enhanced since this design change decreases the chances of CCP and/or SI pump damage due to non-condensable gasses accumulating in the system piping. In addition, no new radiological hazards will be created due to the implementation of this change. The vent connections allows operators to vent the CCP and SI pump suction header, to prevent cavitation and damage to the ECCS pumps. The vent connections are capped, downstream of the isolation valve, to prevent air in-leakage. Administrative controls are required to ensure that the vent valves are closed and the caps installed prior to declaring the CCP and SI pumps operable. The 3/4" piping and valves are fabricated and installed to Seismic Class 1 standards, thereby ensuring that the design basis of the system has not been degraded.

Document No: 12-DCP-0897

Title: Replace Fluidizer Chiller Master Control Timing Relay (12-62-ACMC)

*Description of Change:*

This change replaced the existing Fluidizer Chiller Master Control Timing Relay (timer) with a new model having enhanced capability. This timing relay is part of the Ice Making and Distribution System, the function of which is the production, short-term storage, and delivery of ice to the ice condensers. The function of the fluidizer chiller timer is to initiate the opening and closing of the inlet and outlet valves to the two chiller units in preparation for the defrost cycle and to control the frequency of the defrost cycle. The new timer was installed in the same location as the current timer. With the exception of minor internal wiring changes to account for a different terminal arrangement, the existing wiring was used for the new timer.

*SE Summary:*

The change was reviewed and determined not to constitute an unreviewed safety question. The master control timer, fluidizer chillers, and associated equipment are not accident initiators. The new timer is similar to the existing equipment, is mounted in the same location, and uses the same wiring as the existing timer. The timer is isolated from other systems and equipment that is relied upon for accident mitigation and cannot change, degrade, or prevent any such equipment from performing the relied-upon safety functions. It is functionally equivalent (with increased control capability) and has electrical ratings that are appropriate for the application. The timer is physically and electrically isolated from any equipment whose malfunction is postulated to initiate an accident or prevent an accident from occurring, and is mounted to Seismic Class I criteria, preventing any adverse interactions. The timer does not perform any function relied upon for mitigating the consequences of an accident. None of the equipment associated with the ice making and distribution system, including the timer and the fluidizer chillers, is credited in the basis for any technical specification.



Document No: 12-DCP-0902

Title: De-Energize Bridge Crane (1/2-QM-85) Conductor Bars Inside the Ice Condenser

*Description of Change:*

This design change de-energized the conductors inside the ice condenser by removing the electrical jumpers at each equipment access door. These jumpers connected the inside conductor bars with bars outside of the ice condenser. This change will allow the crane to be operated on the runways outside of the ice condenser while meeting the objective of de-energizing the conductors inside the ice condenser.

*SE Summary:*

This change was reviewed and determined not to constitute an unreviewed safety question. It was determined that de-energizing the conductors inside the ice condenser by removing the electrical jumpers at each equipment access door would not adversely affect the plant's operating licenses, technical specifications, environmental technical specifications, EP, MASP, or the safety function requirements of any system. Since the crane cannot currently be operated inside the ice condenser, the change will have no effect on potential uses and functions of the crane. The evaluation concluded that the change would not create any new accident initiators or affect the operation equipment relied upon to prevent or mitigate the consequences of an accident.

**Document No:** RFC DC-12-2985, Revision 2

**Title:** Reactor Protection and Process Instrumentation Replacement

**Description of Change:**

This modification involved the replacement of the existing Foxboro analog based instrumentation with the Combustion Engineering microprocessor-based instrumentation. The functional and technical performance characteristics of the new Combustion Engineering instrumentation are equal to or better than those of the presently installed Foxboro H-Line instrumentation. The new instrumentation meets the functional, setpoint (accuracy), and time response requirements of the Technical Specifications, i.e., the replacement has no impact on the Technical Specifications.

**SE Summary:**

The change was reviewed and determined not to constitute an unreviewed safety question. A review of Chapter 14 of the UFSAR did not indicate that any analyzed accidents are caused by the failure of the reactor protection system. As a result, this modification to the reactor protection system was determined not to increase the probability of an accident previously evaluated in the UFSAR. Notwithstanding the above, it was recognized that modifications to the reactor protection system could potentially result in an increased probability of occurrence of an anticipated transient without scram (ATWS) as defined in 10 CFR 50.62. Since the new instrumentation will, however, have equal or better accuracies, perform the same functions, maintain the same failure mode, and satisfy the system response times specified in the Technical Specifications, it was determined that this replacement will not increase the probability of occurrence of an ATWS.

**Document No:** RFC DC-12-3093

**Title:** Units 1 and 2, Modify Control Rod Drive Mechanism Cooling System Ductwork

**Description of Change:**

This activity modified the Control Rod Drive Mechanism (CRDM) cooling system by replacing the existing ductwork with flexible sections. The flexible ductwork was installed to preclude vibration-induced cracking and deformation. This activity increased the efficiency of the CRDM cooling system, by reducing the amount of air flow diverted outside the ductwork, thereby increasing the cooling air flow to the CRDM.

**SE Summary:**

This modification was reviewed and determined not to constitute an unreviewed safety question. The modification enhanced the ability of the CRDM cooling system to perform its design function by minimizing vibration-induced cracking and deformation of the ductwork, thereby reducing the cooling air flow out of the ductwork. The modification to the ductwork only impacts the CRDM cooling system and introduces no new failure modes.

*Document No:* RFC-12-4138

*Title:* Replacement of Emergency Diesel Generator Starting Air Compressors

*Description of Change:*

RFC 12-4138 replaced all eight emergency diesel generator starting air compressors. To improve air quality, each of the new compressors included an aftercooler and coalescing filter(s) which will remove the oil and moisture droplets that are entrained in the compressed air. This RFC will relocate/replaced the safety related check valves on the discharge of the air compressors.

*SE Summary:*

This change was reviewed and determined not to constitute an unreviewed safety question. It was concluded that replacing these air compressors would not adversely affect the plant's operating licenses, technical specifications, environmental technical specifications, EP, MASP, or the safety function requirements of the diesel generators. It was determined that the change would not create any new accident initiators or affect the operation equipment relied upon to prevent or mitigate the consequences of an accident. The air compressors would be powered from the same safety related power supplies and are sized so that they will be able to use the same electrical tie-ins.





Document No: RFC-DC-12-3102, Rev. 0

Title: Install Permanent Structure for support of Temporary Shielding of  
Specific Valves in Lower Containment

*Description of Change:*

This activity installed a permanent structure for support of temporary shielding in the lower containments of both Unit 1 and Unit 2. This change will reduce radiation exposure during outages, consistent with ALARA practices. The structure and temporary shielding is located around valves NRV-163, NRV-164, and QRV-111, 112, 113, and 114. Each of these valves is located on the cranewall side of the walkway near 612' elevation platform. The temporary shielding consists of plastic wrapped lead shields which will be installed during outages and removed prior to plant restart. The plastic wrapped lead shields will be placed in racks to form a temporary wall for shielding purposes.

*SE Summary:*

This change was reviewed and determined not to constitute an unreviewed safety question. The evaluation concluded that this change would not change the functionality of any systems. The structure would be attached to the lower containment structure, and installed to seismic class I standards. The structure for holding temporary shields is not expected to interact with any systems or components, or affect the operation of any equipment important to safety. Implementation of this activity includes procedures to assure removal of the plastic-wrapped lead shields from the structures before returning the plant to operation. Any cables and conduits rerouted for this activity were to be reviewed for separation criteria, protection from missiles and/or high energy line break interactions, and impacts on the reactor coolant pump oil collection system Appendix R commitments prior to implementation. A review of the risk potential associated with this activity determined that there would be no impact on the calculated core damage frequency or on the offsite consequences analysis. There were no Technical Specifications impacted by this activity.

**Document No:** 01-PM-0822

**Title:** Replace the Westinghouse Main Generator Step-Up (GSU) Transformer and Deluge System with the Spare BBC GSU Transformer

**Description of Change:**

This PM replaced the existing Westinghouse GSU transformer with the spare Brown Boveri Corporation (BBC) GSU transformer. The Unit 1 GSU transformer ties the generator output to the AEP system grid through the 345kV switchyard. As a result of possibly damaging the windings on the Westinghouse transformer during a unit startup on July 16, 1995 (i.e., internal arcing as a result of over excitation), the transformer was removed from service to perform necessary repairs. In addition to installing the spare BBC transformer, the fire protection deluge water spray system was modified and the existing Syprotec Hydran monitor reinstalled under this design change. As a result of increased lengths in the thermistor detection string, additional Alison 9090-13 sensors were installed along the sprinkler system piping.

**SE Summary:**

This change was reviewed and determined not to constitute an unreviewed safety question. This PM replaced the existing Westinghouse GSU transformer with the spare Brown Boveri Corporation (BBC) GSU transformer. It was concluded that these changes and replacement of the BBC transformer would have no impact on the electrical transmission network and they would perform the same as the Westinghouse design. The GSU transformer and associated auxiliary circuitry (i.e., pump and fan motors, heaters, Hydran monitor, etc.) are not described in the Technical specifications.

**Document No:** 02-PM-1358

**Title:** Replace Cross-Under/Cross-Over Snubbers with Commercial Grade Anchor/Darling Units

**Description of Change:**

This modification replaced 20 snubbers located on Unit 2 Main Steam cross under/cross-over piping system in Turbine Building F1 with commercial grade Anchor/Darling Units.

**SE Summary:**

This Plant Modification was reviewed and determined not to constitute an unreviewed safety question. This modification replaced existing snubbers with new Anchor/Darling snubber units. The system on which these snubbers are located is a Seismic Class III and Non-Safety Related System. This modification does not increase the probability or consequence of any accident previously analyzed. This modification does not adversely affect the plant's operating licenses, Technical Specifications, Environmental Technical specifications, EP, MASP, or the safety function requirements of the cross-under/cross-over piping system.



*Document No:* 12-PM-0560

*Title:* Units 1 and 2, Replace 633' Elevation Laboratory Fume Hoods

*Description of Change:*

This activity replaced the 633' Elevation laboratory fume hoods with fume hoods that incorporate an external insulation design. The modification corrected the inadequate design condition that was introduced by the internal ductwork insulation. The internal insulation restricted air flow through the laboratory fume hoods; thereby leading to a low flow condition.

*SE Summary:*

This change was reviewed and determined not to constitute an unreviewed safety question. The modification enhanced the ability of the laboratory fume hoods to perform their design function by eliminating the flow restriction caused by the internal ductwork insulation. The fume hoods exhaust into the plant ventilation stacks; however, no system interfaces were altered. The radiation monitors affixed to the plant stacks will continue to monitor gaseous effluents following implementation of this modification.

*Document No:* 12-PM-0840

*Title:* Supports for Blowdown Piping on Auxiliary Building Roof

*Description of Change:*

This modification made changes to Seismic Class III pipe supports for the blowdown piping on the auxiliary building roof.

*SE Summary:*

This change was reviewed and determined to not constitute an unreviewed safety question. It was concluded that making modifications to these pipe supports would not adversely affect the plant's operating licenses, technical specifications, environmental technical specifications, EP, MASP, or the safety function requirements of the Blowdown System. The evaluation determined that the change would not create any new accident initiators or affect the operation of equipment relied upon to prevent or mitigate the consequences of an accident.

**Document No:** 12-PM-1156

**Title:** Remove/Relocate Junction Boxes, Conduit and Supports from Main Feedwater Pump Turbine and Pump Couplings

**Description of Change:**

This activity removed/relocated junction boxes, conduits and supports from area of Units 1 and 2 Main Feed Pump Turbine (MFPT) and pump Couplings. This will allow access to the area for tour checks and coupling/bearing maintenance, provide less restricted access to equipment, and improved appearance of the area.

**SE Summary:**

This change was reviewed and determined not to constitute an unreviewed safety question. It was determined that this PM would not adversely affect the plant's Operating Licenses, Technical Specifications, Environmental Technical Specifications, Emergency Plan, MASP, or the safety function requirements of any system. The evaluation determined that implementation of this change did not represent a significant hazard to the health and safety of the public.

**Document No:** 12-PM-1195

**Title:** Plant Modification 12-PM-1195, Install Permanent Lighting on the East and West Sides of Gas Cylinder Storage Building

**Description of Change:**

The Gas Cylinder Storage Building is divided approximately in the center by a concrete block wall. This wall projects out from both the east and west sides of the Gas Cylinder Building and causes shadows between this wall and the Unit #2 Turbine Building. To correct the inadequate lighting in this location, this PM installed additional security lighting.

**SE Summary:**

The change was reviewed and determined not to create an unreviewed safety question. It was determined that this change would not adversely affect the plant's operating licenses, Technical Specifications, Environmental Technical Specifications, EP, MASP, or the safety function requirements of the security lighting system. This PM did not create any new accident initiators, nor pose a hazard to the public health.

**Document No:** 12-PM-1250

**Title:** Grinnell BOP Snubber Hydraulic Changeout

**Description of Change:**

This design change modified 117 balance-of-plant Grinnell snubbers located on main steam and feedwater lines in the auxiliary building and Unit 1 and 2 turbine buildings. The modification consisted of installing a "Configuration A Upgrade Kit" which replaced the plastic hydraulic reservoirs with pressurized steel reservoirs, directly mounted the reservoirs, eliminating external tubing, and installed a temperature stable control valve to better control bleed rate and resist clogging. The installation of this upgrade kit is expected to minimize hydraulic fluid leakage and increase the reliability of the snubbers. Implementation of this PM will continue on a contingency basis when the snubbers are scheduled for maintenance or testing.

**SE Summary:**

This change was reviewed and determined to not constitute an unreviewed safety question. It was concluded that replacing these snubbers will not adversely affect the plant's operating licenses, technical specifications, environmental technical specifications, EP, MASP, or the safety function requirements of any plant system. It was determined that the change would not create any new accident initiators or affect the operation of equipment relied upon to prevent or mitigate the consequences of an accident. Neither the function of the snubbers nor the main steam or feedwater lines are adversely impacted by this type of component modification.

**Document No:** 12-PM-1342

**Title:** Steam Dump Valve Replacement

**Description of Change:**

This design change replaced the nine (9) condenser (steam) dump valves for each unit. The original (Fisher) valves needed frequent maintenance due to body to bonnet leaks. The new valves (Jamesberry) are 10" globe valves with pneumatic piston actuators. The air supply to the valves also required minor revision. The valves and affected equipment are non-safety related and seismic class III.

**SE Summary:**

This change was reviewed and determined not to create an unreviewed safety question. This modification replaced the existing valves with an improved design and made minor modifications to the control air supply. The functional operation of the valves, including associated controls and interlocks, were determined to be unaffected by the modification. The flow characteristic of the new dump valves are similar to the existing ones; therefore, the capacity of the steam dump system will remain 40% of the full load steam flow as currently stated in the UFSAR.

**Document No:** 12-PM-1365

**Title:** Install Permanent Lighting on North Side of Maintenance Service Building

**Description of Change:**

During a recent QA audit, light meter readings were taken in several locations throughout the protected area. A security lighting deficiency was identified at the North side of the Maintenance Service Building. To correct the inadequate lighting in this location, additional lights were installed on the North wall between the two transformers and the Maintenance Service Building.

**SE Summary:**

This change was reviewed and determined not to constitute an unreviewed safety question. It was concluded that additional security lighting would not create an accident initiator or affect the operation equipment relied upon to prevent or mitigate the consequences of an accident. The evaluation concluded that this PM would not adversely affect the plant's operating licenses, Technical Specifications, Environmental Technical Specifications, EP, MASP, or the safety function requirements of the security lighting system. Implementation of this PM does not represent a hazard to the public health and safety.

**Document No:** 12-PM-1441, Addendum 2

**Title:** Upgrade of Fire Door Sequencers

**Description of Change:**

The original 12-PM-1441 proposed to install a stiffener to the top of the door frame of several fire doors, including 1-DR-TUR-226 and 1-DR-TUR-229, to eliminate recurring maintenance problems. Addendum #2 to the PM allows use of an alternate method to fix the doors by removing the door sequencer and installing manual flush bolts. The alternate method represents a minor change from the way the doors are fixed.

**SE Summary:**

This change was reviewed and determined not to constitute an unreviewed safety question. It was concluded that this PM would not adversely affect the plant's operating licenses, Technical Specifications, Environmental Technical Specifications, EP, MASP, or the safety function requirements of the security lighting system. This PM does not represent a hazard to the public health and safety and the conclusions of the original safety evaluation remains valid and complete.

Document No: 12-PM-1452

Title: Disconnect & Abandon Heat Trace Circuits

*Description of Change:*

This plant modification disconnected, and abandoned in place, Boron Injection Tank heat trace circuits and associated alarmstats which are no longer required. Abandonment of these circuits and their alarmstats will reduce maintenance costs, provide radiological ALARA benefits, eliminate associated standing alarms in the control room, and reduce Emergency Diesel Generator loading. Fourteen total circuits were identified for abandonment: #083, 088, 089, 090, 320, 321, 322, 323, 324, 325, 326, 327, 328, and 370.

*SE Summary:*

This change was reviewed and determined not to constitute an unreviewed safety question. Review of the UFSAR indicated that accident analysis modeling of the safety injection system in LOFTRAN did not take credit for "the low concentration borated water, which must be swept from the lines downstream of the boron injection tank isolation valves prior to the delivery of boric acid to the reactor coolant loops." The analysis conservatively assumes a boron concentration of 0 ppm for the boron injection tank (BIT). The nominal RWST boric acid concentration is sufficient for providing shutdown reactivity at the onset of an accident evaluated in the UFSAR. The BIT is now filled with RWST borated water and provides solely a pressure boundary function. It was concluded that this PM will not adversely affect the plant's operating licenses, Technical Specifications, Environmental Technical Specifications, EP, MASP, or the safety function requirements of the any plant system. This PM will not create any new accident initiators and will not represent a substantial hazard to the public health and safety.

Document No: 12-PM-1464 REV. 0

Title: Replacement of 1-SV-168's And 2-SV-168's With NUPRO-RL3 Valves

*Description of Change:*

12-PM-1464 replaced existing valve model NUPRO-SS-CPA2-50 used for valve 1-SV-168-1, 2, 3, 4 and 2-SV-168-1, 2, 3, 4 with a new model NUPRO-RL3 series valve. The previous valves were set at 75 psi and not designed to re-seal until pressure drops to 50 psi. The new model, NUPRO-RL3 is more appropriate for the application because it is designed to reseal @ 68 psi. These valves are located in the Instrument Piping Sampling Room for Units 1 and 2 on the sampling rack SRA Fl. The valves are not safety related or safety interfaced.

*SE Summary:*

This change was reviewed and determined not to constitute an unreviewed safety question. It was concluded that this change would not adversely affect the plant's operating licenses, technical specifications, environmental technical specifications, EP, MASP, or the safety function requirements of the Instrument Piping Sampling System. It was determined that the change would not create any new accident initiators or affect the operation equipment relied upon to prevent or mitigate the consequences of an accident.



*Document No:* 12-TM-091698

*Title:* Temporary Modification 12-TM-091698

*Description of Change:*

This temporary modification documented the configuration of not having metallic barrier plates in the rear of the following 4kV breaker cubicles: 1B4, 1D2, 2B4, 2D2, T21B4, T21D1, and T11A12 on Units 1 and 2. The barrier plates should be located inside the breaker cubicle and are intended to prevent contact between personnel and energized cables during installation or removal of PT fuses. The plates were removed at some point in the past and not reinstalled. This activity documents the configuration until the barrier plates are reinstalled in the future.

*SE Summary:*

This change was reviewed and determined not to constitute an unreviewed safety question. It was concluded that the missing barrier plates are not accident initiators, would not affect the operation of the breakers or any other equipment, and would not create any adverse interaction with other equipment. The missing plates would not change, degrade, or prevent any safety-related system or component from performing an accident mitigation function. The barrier plates prevent personnel injury by preventing contact with energized equipment while the door is open. These components do not affect the operation of the breakers. The absence of the barrier plates does not affect any technical specifications or their bases.



Document No: TM-01-98-02

Title: Temporary Modification - Temporary Reduction in Pressurizer Heater Capacity

*Description of Change:*

During the 1997 Unit 1 refueling outage, testing of the pressurizer heaters revealed a faulty heater in backup heater group A1. Specifically, heater #67 was suspected to be faulty. Testing of the pressurizer heaters is performed from the 4kV room at the respective motor control center. Locating and isolating the faulty heater required additional testing under the pressurizer. Because of ALARA and plant system conditions, this was not desirable at that time. Therefore, the heater was electrically isolated by opening the associated MCC breaker for the duration of cycle sixteen. That also resulted in isolating heaters #38 and #68, since they are fed by the same MCC. The temporary modification was permitted to exist under a red tag clearance permit until the next refueling outage. At that time the heater was properly tested to determine if it could be repaired. If the heater were unable to be repaired, a design change would have been initiated to permanently disconnect the heater.

*SE Summary:*

This change was reviewed and determined not to constitute an unreviewed safety question. The pressurizer heaters are not credited for accident mitigation, nor are they considered accident initiators. The heaters are only considered for operational flexibility, and not credited for achieving safe shutdown conditions. The heaters will not impact the function of other equipment that is used to mitigate accidents. Reducing their capacity to 1616 kW (control plus backup) represents an insignificant reduction in backup pressurizer heater capacity relative to the allowable operating margin. The remaining 1616 kW is more than adequate to ensure Reactor Coolant System pressure control during normal operations as well as natural circulation conditions during hot standby. It was determined that the backup heaters, which are tested to demonstrate the ability to be powered from the emergency diesel generators, would still have a capacity within the acceptable range allowed for normal operation and analyzed transients, thereby ensuring the bases for the technical specifications were maintained.

**Document No:** TM-01-98-05

**Title:** Temporary Modification to Relocate a Section of Conduit Associated with Containment Air Temperature Monitoring

**Description of Change:**

The proposed activity involved a temporary modification to the Containment Air Temperature Monitoring system to facilitate inspection of part of the containment liner in Unit 1. Inspection of part of the containment liner required the temporary removal of a section of conduit containing cable 1-7172CG-1. This cable connects Resistance Temperature Detector (RTD) 1-ETR-16 to recorder 1-SG-18 via containment penetration 1 218. This temporary modification disconnected 1-ETR-16, pulled back the cable, relocated the section of conduit and removed the ETR from being scanned by the recorder.

**SE Summary:**

The change was reviewed and determined not to constitute an unreviewed safety question. The activity involved equipment whose function and interfaces are unrelated to any accident initiators. The containment air temperature monitoring channels and their functions are not relied upon to provide or initiate automatic mitigating functions, are physically unrelated to any pertinent pressure boundaries, and are electrically separated from safety related systems, structures or components. The remaining 16 temperature channels would continue to perform their essential monitoring functions, including monitoring containment temperatures under normal and post-accident conditions. It was concluded that the activity would not affect any safety related function, or impact the Technical Specifications or their Bases.

**Document No:** TM-01-98-08

**Title:** Temporary Modification - Freeze Sealing of Non-Essential Service Water (NESW) System

**Description of Change:**

This activity installed two freeze seals in a section of 16-inch diameter non-essential service water piping, as required to replace or repair valves 1-WMO-906, 12-NSW-111 and 12-NSW-112.

**SE Summary:**

The activity was reviewed and determined not to constitute an unreviewed safety question. The effects of thermal stress, seismic loading, piping material embrittlement, and turbine building flooding were evaluated, and determined to be within design limits. Additionally, the activity ensured the majority of services provided by this non-safety related system are maintained while no impact on safety related systems or equipment. Furthermore, the evaluation concluded that no new seismic, other events or failures would be created, and no new types of interactions with safety related structures or equipment were identified. The activity would not affect containment isolation function of the system, and therefore, would not affect the Technical Specifications or their Bases.

Document No: TM-01-98-09

Title: Temporary Modification - Install Ice-Melt Collection and Transfer System

*Description of Change:*

This temporary modification installed a temporary ice-melt collection and transfer system for collecting, storing, and transferring the melted ice from the Ice Condenser to the CVCS Monitor Tanks for discharge for Units 1 and 2, via circulating water discharge line to Lake Michigan.

*SE Summary:*

The change was reviewed and determined not to constitute an unreviewed safety question. It was determined that potential leakage, which is insignificant compared with the plant's available drainage capacity, has no impact on equipment required for safe shutdown, and is well below the plant flooding design basis. For this TM, a temporary assembly, made for passage of temporary pipe or cables, was installed in the penetration core. This assembly was provided with isolation capability, in the unlikely event that containment isolation was required. As such, the unlikely release of radioactive material to the outside environment, through this assembly was prevented. There would be no change to the method of discharge or radiation monitoring of the liquid being discharged to the environment. The safety related Ice Condenser system and its associated equipment is not required to function in Mode 5, and is not evaluated in UFSAR as an important safety system/equipment during Mode 5 of plant operation. The safety related containment penetration 1-CPN-71, which is used in this TM under the approved plant procedure 12 EHP 6040 per 138, would maintain it's isolation capability. The function of other equipment involved with this TM are not required for accident mitigation and/or safe shutdown and would not cause the structures, systems and components (SSCs) to fail performing their intended functions during Mode 5 of plant operation.



*Document No:* TM-01-98-10

*Title:* Temporary Modification to Install a Hose to Drain the Unit 1 Ice  
Condenser Fan Cooler Unit Condensate Drain Tanks

*Description of Change:*

This Temporary Modification installed a hose approximately ten feet in length on the 3/4" drain valve 1-WD-302 and routed it to the pipe tunnel sump for discharge into the sump in Unit 1. The 3/4" drain valve is located inside containment on the 3" vertical header which collects the drainage from the Ice Condenser fan cooler units' condensate drain tanks. This Temporary Modification allowed containment isolation valves located in the drain header to remain closed during normal operations while still providing drainage for the header. The drain flow path was to the dirty waste holdup tank via the pipe tunnel sump instead of to the clean waste holdup tank in the Waste Disposal System. This is temporary modification was removed when Design Change DCP-887, Ice Condenser Restoration, which restored the function of drain pot loop seal CPN-31 was installed.

*SE Summary:*

This Temporary Modification was reviewed and determined not to constitute an unreviewed safety question. The Safety Evaluation noted that while the drainage path was being altered temporarily, the function to remove water from the ice condenser fan coolers units' condensate drain tanks remained the same. Closing the drain header valves, which are also containment isolation valves, to the clean waste holdup tank satisfied T/S 3/4.6.3.1 for containment isolation. Keeping the isolation valves in the drain header closed enhanced the ability of the isolation valves to perform their event mitigating function of containment isolation. The Safety Evaluation also determined that the tygon tubing would not fail due to its loss of strength and ductility and become debris in containment. The Temporary Modification did not affect the Technical Specifications or bases.





Document No: TM-01-98-19

Title: Temporary Modification - Install Control Air Mechanical Jumpers  
Inside Unit 1 Containment

*Description of Change:*

This TM crosstied the No. 1 and No. 2 containment control air headers for the 50, 85 and 100 psig ring headers for Unit 1. The 50 psig headers were crosstied by connecting a section of 3/4" air hose between valves 1-CA-613 to 1-CA-390, or between 1-CA-592 to 1-CA-420, depending on which side of the ring header is used. The 85 psig headers were crosstied by connecting a section of 3/4" air hose between valves 1-CA-573 to 1-CA-490, or between 1-CA-573 to 1-CA-421, depending on which side of the ring header is used. The 100 psig headers were crosstied by connecting a section of 3/4" air hose between valves 1-CA-383 and 1-CA-380.

*SE Summary:*

The change was reviewed and determined not to constitute an unreviewed safety question. The installation of mechanical jumpers to crosstie the Unit 1 containment control air headers maintain the rated pressure on the 50, 85 and 100 psig headers. Pressure and flow would be maintained to each respective header. Control air pressure to required services would be maintained via the temporary mechanical jumpers. The stroke times of air operated valve would not be adversely affected. Failure of the control air system causes equipment important to safety to go to their fail safe positions. No new radiological hazard would be created. The mechanical jumper cross tie installation utilizing 3/4" air hose (rated to a pressure in excess of the header pressures) is limited to the Unit 1 lower containment annulus. The temporary air hoses were to be restrained in accordance with procedure. The margin of safety is not changed, since the work is performed in Modes 5 or 6, while the T/S requirements are applicable in Modes 1,2,3 and 4.

*Document No:* TM-01-98-22

*Title:* Temporary Modification - Temporary Replacement for Local Flow Indicator, 1-CFI-475

*Description of Change:*

Under partial installation of 12-DCP-0231, the orifice plate and the local flow indicator for 1-CFI-475 were replaced to expand the instrument's measurement range. This was to support new flow limits for surveillance and for CCW flow balancing. The permanent replacement indicator was not available for installation until November and the associated new orifice plate had to be installed during the upcoming RCS Depressurization. In the interim, the old indicator would see dp from the new orifice plate and not read out the correct gpm value.

The Temporary Modification installed suitably ranged differential pressure (dp) indicating equipment to provide useable readout of the dp from the new permanent orifice plate. This allowed the operators to periodically verify that the CCW return flowrate from the Containment Penetration cooling coils is within established limits until the permanent readout could be installed. The permanent changes were completed before the next CCW flow balance.

*SE Summary:*

This change was reviewed and determined not to constitute an unreviewed safety question because equipment important to safety would not be adversely impacted and appropriate implementation requirements were specified to preclude safety interface concerns. This temporary modification provided an expanded range indication for a necessary flowrate until permanent changes could be completed. The change provided expanded flow measuring ranges for the Containment Penetration Coolers, Component Cooling Water return header flow monitor. This facilitated periodic verification that CCW flow is within its established limits.



**Document No:** TM-01-98-25

**Title:** Temporary Modification - Remove 8-inch Piping for the Unit 1 West Motor Driven Auxiliary Feedwater Strainer Discharge

**Description of Change:**

This temporary modification removed the section of 8" piping between the Unit 1 West Motor Driven Auxiliary Feedpump (WMDAFP), 1-PP-3W, and its suction strainer (1-OME-32W) and in its place installed a test connection. The purpose of this TM was to facilitate a flow testing of Essential Service Water (ESW) through the strainer in accordance with Operations Procedure 01-OHP SP.196.

**SE Summary:**

The change was reviewed and determined not to constitute an unreviewed safety question. This activity was conducted while both units were in cold shutdown (Mode 5). The Auxiliary Feed Water system is not relied upon for an accident mitigation function in Modes 5 or 6; therefore, it is not required to be operable in these operational modes. Failure of this system is not an accident initiator. Plant Operators would ensure the required ESW system pressure would be maintained to ensure the ESW flow load for this activity would not impact the operation and functionality of the ESW system. It was determined that this activity would not create any new radiological hazards, and that disassembly of the strainer discharge piping and connection of a test elbow assembly would not cause the malfunction of this safety-related equipment and system.

**Document No:** TM-01-98-29

**Title:** Temporary Modification to Install a Leak Collection Device on Panels GRB (Generator Rear Panel B) and GRC (Generator Panel C) in the Unit 1 Control Room

**Description of Change:**

This Temporary Modification installed a leak collection device (LCD) on framing above the panels GRB and GRC in the Unit 1 Control Room. The LCD will capture snow or condensation that can leak into the control room via the Control Room Pressurization System intake duct.

**SE Summary:**

This Temporary Modification was reviewed and determined not to constitute an unreviewed safety question. This Temporary Modification was installed to prevent any snow or condensation that might leak into the control room via the Control Room Pressurization System intake duct from coming into contact with any electrical equipment within the control room. It was determined that this change would not increase the probability or consequence of an accident previously analyzed in the UFSAR, or create an accident of a different type. This change did not impact any Technical Specifications, any equipment important to safety or the health and safety of the general public.

**Document No:** TM-01-99-01

**Title:** Temporary Modification to Provide Temporary Connections Between a Datalogger and Various Test Points

**Description of Change:**

This Temporary Modification provided temporary connections between a datalogger and various test points inside inverter 1-CRID-1-INV cabinet located in the CRID inverter room in the Unit 1 auxiliary building. The purpose of this Temporary Modification was to gather electrical parameter data that was utilized to determine the cause of an abnormal auto transfer of the inverter from the normal 250 VDC supply to the 120 VAC backup supply.

**SE Summary:**

This Temporary Modification was reviewed and determined not to constitute an unreviewed safety question. The Safety Evaluation determined the installation and connection of the Datalogger to non-intrusively gather electrical parameter data from the Unit 1 Inverter 1-CRID-1-INV did not affect the function or method of the inverter to perform its normal and safety related functions. The installation of the Datalogger was not a test or an experiment, it did not change or modify the plant or any equipment in the plant, and the temporary installation did not affect any existing procedures or plans.

**Document No:** TM-02-98-02

**Title:** Temporary Modification - Install Hose to Drain Unit 2 Ice Condenser Fan Cooler Unit Condensate Drain Tanks

**Description of Change:**

This Temporary Modification installed a hose approximately ten feet in length on the 3/4" drain valve 2-WD-302 and routed it to the pipe tunnel sump for discharge into the sump. The 3/4" valve drain valve is located inside containment on the 3" vertical header which collects the drainage from the Ice Condenser fan cooler units' condensate drain tanks. This Temporary Modification allowed containment isolation valves located in the drain header to remain closed during normal operations while still providing drainage for the header. The drain flow path was to the dirty waste holdup tank via the pipe tunnel sump instead of to the clean waste holdup tank in the Waste Disposal System.

**SE Summary:**

This temporary modification was reviewed and determined not to constitute an unreviewed safety question. The Safety Evaluation noted that while the drainage path was being altered temporarily, the function to remove water from the ice condenser fan coolers units' condensate drain tanks remained the same. Closing the drain header valves, which are also containment isolation valves, to the clean waste holdup tank satisfied T/S 3/4.6.3.1 for containment isolation. Keeping the isolation valves in the drain header closed enhanced the ability of the isolation valves to perform their event mitigating function of containment isolation. The Safety Evaluation also determined that the tygon tubing would not fail due to its loss of strength and ductility and become debris in containment.

**Document No:** TM-02-98-04

**Title:** Remove Primary Disconnect Shutter From 4 KV Switchgear Cubicle 2-T21B4

**Description of Change:**

This TM permits the AB Emergency Diesel Generator feed to 4KV Bus T21B switchgear cubicle (2-T21B4) in Unit 2 to remain in service with the primary disconnect shutter removed. This TM only documents the temporary configuration of this cubicle and will not add any new equipment to the plant. The shutter is a personnel safety attribute required by ANSI/IEEE C37.20-1969. Its function is to isolate maintenance personnel from energized stabs when the breaker is removed (racked out) from service.

**SE Summary:**

The change was reviewed and determined not to constitute an unreviewed safety question. The shutter for switchgear cubicle 2-T21B4 is a personnel safety attribute. Its presence and potential failure is not an initiator of any accident analyzed, and it is not a barrier relied on to prevent accident initiation. The shutter lift mechanism would remain in place, and its seismic mounting qualification is unaffected by removal of the shutter. Therefore, the evaluation determined that there was no increase in the probability that the mechanism will become a missile during a seismic event. The switchgear cubicle 2-T21B4 shutter does not perform any functions relied upon to mitigate the consequences of analyzed accidents. The circuit breaker does not perform any function while racked out or removed. Likewise, the shutter has no function when the circuit breaker is in the connected position and capable of performing its design function. Therefore, the shutter is unrelated to breaker/switchgear operability and to accident mitigation. The shutter does not complement or assist any other safety-related equipment to perform any function and its removal will not adversely impact any other equipment. It was determined that this condition may increase the potential for electrical shock and burns but would not create the possibility of a radiological or industrial accident that is different from those already considered. The shutter impacted by this TM is not described in this Bases section or in any other section of the Technical Specifications. Operability of the switchgear was not impacted by removal of the shutter.



Document No: TM-02-98-05

Title: Temporary Modification - Install Temporary Ice Melt Collection  
System - Unit 2

*Description of Change:*

This TM installed a temporary system to collect melted ice from the Ice Condenser allowing it to be transferred to the CVCS Monitor tanks for discharge to the Lake. This Temporary Modification allows removal of the ice from the Ice Condenser in order to inspect the ice baskets and repair or replace the baskets, as needed.

*SE Summary:*

The change was reviewed and determined not to constitute an unreviewed safety question. This TM installed a temporary ice-melt collection and transfer system to collect and transfer melted ice from the Ice Condenser, via CVCS Monitor Tanks, to the circulating water discharge during Mode 5 of plant operation. There is no accident analysis described in UFSAR which can be initiated and affected by the Ice Condenser or any equipment/system used in this TM during Mode 5 of plant operation. Neither the Ice Condenser nor the systems/equipment used in this TM are required to mitigate the consequences of an accident while the unit is in Mode 5. Also, as described in UFSAR section 5.4, the safety related containment service penetration 2-CPN-71, which allows passage of the hose and electrical cables for this TM operation, is normally maintained closed by inboard and outboard blind flanges during power operations, when containment integrity is required, but is allowed to be used for temporary services during Modes 5 & 6 of plant operation. It was determined that the radiological activity in the ice melt was very minute and would not pose a problem to plant workers or public, while being temporarily stored in the tanks in the yard. The function of other equipment involved with this TM was not required for accident mitigation and/or safe shutdown, and would not cause the structures, systems and components (SSCs) to fail while performing their intended functions during Mode 5.



Document No: TM-02-98-07

Title: Temporary Modification - Supply Temporary Power to Spare Ice  
Melt/Vacuum System

*Description of Change:*

This temporary modification supplied 600 VAC power from circuit breaker 21C13 to the spare Ice Melt/Vacuum system located on the 650' elevation of the Auxiliary Building via a temporary power cable. Breaker 21C13 currently services the Unit 2 Reciprocating Charging Pump. The feeder cable to this pump was disconnected and a new Balance of Plant cable was installed from the switchgear to the Ice Melt/Vacuum System. The circuit breaker control circuitry is modified to eliminate certain auxiliary relays that are specific to the operation of the Reciprocating Charging Pump and not needed for the temporary load. The IAC protective relay was also disabled because it can not be set high enough to avoid tripping the breaker.

*SE Summary:*

The change was reviewed and determined not to constitute an unreviewed safety question. The temporary cable added under the TM was installed in accordance with the guidance contained in Mechanical Design Guideline 5700-8 to prevent adverse interaction with nearby Seismic Class I systems and equipment. The cable was restrained in accordance with procedure PMP 5020.RTM.001 for securing transient equipment. Train and channel separation guidelines were maintained. Load shed and load conservation attributes of circuit breaker 21C13 were not altered. The Reciprocating Charging Pump is not an accident initiator and is not relied upon to prevent any previously analyzed accidents from occurring. Temporary power and associated equipment do not perform any functions relied upon to mitigate the consequences of any accidents. Physical isolation and restraint of the temporary power cable prevents the cable from adverse physical interaction with any other equipment that is relied on for mitigating the consequences of an accident. Retention of load shed and load conservation features of breaker 21C13 prevents adverse interaction with the emergency diesel generators. The Reciprocating Charging Pump is capable of operation and the probability of the pump adversely interacting with equipment important to safety is decreased. Operability of the Reciprocating Charging Pump is not credited to mitigate the consequences of an accident. Disconnecting power from the pump has no impact on the operability of the two Centrifugal Charging Pumps or any other equipment. There are no unique aspects of the temporary power installation that are capable of initiating a credible accident of a different type. The temporary power cable is not important to safety and possible malfunctions of this cable are the same as those of any other power cable in the plant. Cable routing and restraint considerations ensure that there are no adverse interactions with other equipment that could cause a malfunction. The changes associated with the temporary modification do not affect any technical specifications or the basis thereof.

**Document No:** TM-02-98-08

**Title:** Temporary Modification - Install Two 1-Inch Diameter Valves on the Unit 2 West ESW Strainer Discharge Piping

**Description of Change:**

The temporary modification installed an additional 1" diameter valve on each basket of the Unit 2 West ESW pump strainer discharge. The location of these valves were immediately downstream of valves 2-WRV-764 and 2-WRV 774 and used for measuring leakage through the strainer for ESW pump troubleshooting purposes.

**SE Summary:**

The change was reviewed and determined not to constitute an unreviewed safety question. The installation of two valves on the non-safety related and seismic class III piping on the ESW pump strainer backwash piping did not degrade or prevent actions described in the UFSAR. No permanent changes to the design configuration of the ESW system were made. These changes would not increase the probability or consequences of an accident or malfunction or reduce the margin of safety. In addition, the temporary modification did not affect the Technical Specifications or bases.

**Document No:** TM-02-98-10

**Title:** Temporary Modification to Install a Leak Collection Device on Panel IV (Isolation Valve) in the Unit 2 Control Room

**Description of Change:**

This Temporary Modification installed a leak collection device (LCD) on framing above the Isolation Valves (IV) control panel in the Unit 2 Control Room. The LCD will capture snow or condensation that can leak into the control room via the Control Room Pressurization System intake duct.

**SE Summary:**

This Temporary Modification was reviewed and determined not to constitute an unreviewed safety question. The leak collection device is a passive device to collect any moisture that may drip from an air intake duct. The location, installation, use and impact of the leak collection device installed on a seismically qualified panel was thoroughly evaluated in relation to the FSAR, Technical Specifications, and the need to prevent any moisture from dripping on the control room cabinets. This evaluation determined that no adverse impact on area equipment would occur.



**Document No:** TM-12-98-01

**Title:** Temporary Modification to Install a Test Probe Assembly for  
Automatic Gas Analyzer, 12-QC-1400

**Description of Change:**

This Temporary Modification installed a test probe assembly in series with the sample tubing routed to the existing hydrogen probe for Automatic Gas Analyzer, 12-QC-1400. The test probe assembly contained a new type hydrogen and oxygen probes. The reason for installing a test probe assembly containing a new hydrogen and a new oxygen probe was to demonstrate the capability, reliability, and performance of new type probes without disturbing the existing hydrogen probe and its function.

**SE Summary:**

This Temporary Modification was reviewed and determined not to constitute an unreviewed safety question. The temporary installation of a test probe assembly and the use of new hydrogen and oxygen probes to evaluate the capabilities of the new hydrogen and oxygen probes did not alter the function of existing Automatic Gas Analyzer 12-QC-1400 or the gas sampling system. Automatic Gas Analyzer 12-QC-1400 was not modified, the FSAR did not require updating, existing procedures did not require change, existing plans did not require change, the Technical Specifications did not require change hence there was no licensing basis change.

**Document No:** TM-12-98-03

**Title:** Temporary Modification to Remove Damaged Grease Fittings and Lines  
on East Auxiliary Building Crane

**Description of Change:**

This Temporary Modification removed damaged grease fittings and grease lines on the East Auxiliary Building crane and installed standard pipe plugs to enable use of the crane until the correct parts were procured and installed.

**SE Summary:**

This Temporary Modification was reviewed and determined not to constitute an unreviewed safety question. The East Auxiliary Building crane is a maintenance tool. Temporarily installing pipe plugs in place of grease fittings or grease lines on the East Auxiliary Building crane did not change the plant as described in the SAR, the Technical Specifications, the Emergency Plan, or the Security Plan. No changes to procedures were required. No changes to the FSAR or the Technical Specifications were required as result of this Temporary Modification. The temporary installation of pipe plugs on the East Auxiliary Building crane did not affect any Design Basis Event or licensing basis.

Document No: TM-12-98-04

Title: Temporary Modification to Install a Hose for Gravity Draining Ice-Melt to Temporary Ice Melt (TIM) Tanks and CVCS Monitor Tanks

*Description of Change:*

This TM installed 3/4" hose to connect TIM tanks and CVCS monitor tanks for gravity draining of ice-melt (borated water) and removed this installation when the draining operation was completed. The TIM tanks were also removed from the temporary lay down area for appropriate housekeeping purposes.

*SE Summary:*

Results of the safety evaluation indicated that this TM would not create an unreviewed safety question and that the implementation of this TM would not represent a hazard to the public health and safety. Installation of the temporary modification would not create a change to the Technical Specifications and bases.

Document No: TM-12-98-11

Title: Temporary Modification to Install an Ice Delivery System

*Description of Change:*

This Temporary Modification installed an ice delivery system from the ice making machines, located on the Unit 1 side to elevation 650', to an ice loading station located in the Unit 2 crane bay. The temporary ice delivery system was used to transport ice produced in ice making machines to refrigerated trucks located in the crane bay of Unit 2.

*SE Summary:*

This Temporary Modification was reviewed and determined not to constitute an unreviewed safety question. The production, transporting to refrigerated trucks, storing, and later use of ice instead of producing and using the ice was a change from plant design that was evaluated at length. This was a temporary change that was removed when the ice condensers were filled so no permanent changes were made to the plant, procedures, or plans. The four inch fire hose and its path from the ice making machine to the crane bay or unit 2 was evaluated and determined not to impact safety, safety related systems, the UFSAR, existing procedures, Technical Specifications, the Emergency plan, or the Security plan.

Document No: TM-12-98-13

Title: Temporary Modification - Use 4-Inch Flex Hose to Transport Ice to  
Temporary Ice Receiving Station

*Description of Change:*

The temporary modification allowed use of 4" flex hose to pneumatically transport ice from the ice-making machines to a temporary ice receiving station near the Contractor Access Control building. At the receiving station the ice was to be bagged and shipped via refrigerated truck to an off-site cold storage.

*SE Summary:*

This change was reviewed and determined not to constitute an unreviewed safety question. Potential failures addressed were as follows: 1) the temporary flex hose installation which is operated to pneumatically transport ice would be seismically supported to preclude impact on equipment important to safety; 2) at the flex hose exit interface from the Auxiliary Building, a seal would be provided to facilitate building negative pressure maintenance; and 3) a mechanism to allow quick shutoff of ice flow and close-off of the hose would be provided. In consideration of the aforementioned actions, the possibility of adverse component interactions and potential failures, which culminate in uncontrolled discharges to atmosphere, would thereby be precluded. Therefore, the probability and/or the consequences of an associated accident would not increase. The temporary modification does not change the Technical Specifications or bases.



Document No: TM-12-98-14

Title: Temporary Modification - Add Storage Tank Capacity to the Borax  
Mixing System for Ice-Making

*Description of Change:*

The change installed a 5000 gallon polyethylene storage tank in the Unit 1 refueling water storage tank (RWST) yard, in the vicinity of the Condensate Storage Tanks and Primary Water Storage Tank. The temporary tank provided additional capacity for borax solution to be used in the ice-making process.

*SE Summary:*

The change was reviewed and determined not to constitute an unreviewed safety question. The location for the system is in the Unit 1 RWST yard, in the vicinity of the Condensate Storage Tank and Primary Water Storage Tanks. All equipment was secured in such a manner as to not cause the generation of a missile during a seismic event. The temporary storage tank has spill prevention implemented to prevent the uncontrolled discharge of borax solution to the ground. The only applicable accidents during the period of time in which this temporary modification is in place are the fuel handling accident and boron dilution event. The installation of a temporary supplemental borax storage system does not increase the consequences of these types of accidents, since the borax mixing system and the ice machines are not utilized in the mitigation of these accidents. In addition, no new radiological hazards were created due to the implementation of this TM. The proposed TM does not adversely affect any equipment considered important to safety, or interfere with the function of equipment important to safety. No new radiological hazards were created due to the implementation of this TM. This temporary modification did not adversely impact the function or design basis of any structure, system or component important to safety as described in the UFSAR. No new failure modes were created. The temporary installation of the supplemental borax solution storage and transfer system for operating the ice making machines at their full capacity did not reduce the margin of safety as defined in the Bases for Technical Specification 3.6.5.1(a), "Ice Condenser; Ice Bed."





Document No: TM-12-98-16

Title: Temporary Modification - Install Supplemental Containment Cooling System

*Description of Change:*

A temporary Supplemental Containment Cooling System was installed and operated during the late spring, summer and early fall of 1998, in order to improve containment working condition and support refrigeration of the Ice Condensers following the ice melt, by reducing temperature and humidity inside the Containment Buildings (Units 1 & 2). The supplemental containment cooling system will operate only during Mode 5 and 6.

*SE Summary:*

The change was reviewed and determined not to constitute an unreviewed safety question. The chillers were set to maintain an average containment temperature of approximately 65 F during operation of this TM. This temperature is within the limits specified in the UFSAR and Technical Specifications. This TM required a temporary transformer to be connected to the Containment Access Building transformer 12-TR-CAB, which supplies power to the Radiation Protection Access Control (RPAC) building. The Containment Access Building transformer is not credited in the UFSAR accident analysis, and is not connected to a safety bus required for safe shut-down on accident mitigation. This TM was installed during Mode 5 of plant operation, and will operate only during the plant's outage. None of the systems/equipment involved in this TM, except the safety-related containment isolation valves on the NESW supply and return headers to and from the containment ventilation units, are required to perform a safety function in Modes 5 or 6. These valves shall close upon receiving a phase B actuation signal. This TM will not change the capability, functionality, or integrity of these containment isolation valves, and will not prevent the valves from performing their safety function. The Supplemental Containment Cooling System is allowed to operate only during Modes 5 and 6, it is designed to maintain the average containment temperature at 65 F, which is within the limitations specified in the T/S. No other requirements in the T/S are related to the operation of this TM.

Document No: TM-12-98-17

Title: Temporary Modification - Install Temporary Borax Storage and Transfer System

*Description of Change:*

This change temporarily installed a 5000 gallon polyethylene storage tank in the Unit 1 RWST yard, in the vicinity of the Condensate Storage Tanks and Primary Water Storage Tank. The temporary tank provided additional capacity for borax solution to be used in the ice-making process. This TM superseded TM-12-98-14.

*SE Summary:*

The change was reviewed and determined not to constitute an unreviewed safety question. The only accidents previously evaluated in the UFSAR while the plant is in Mode 5 or 6 are fuel handling accidents and boron dilution event. The installation of a temporary supplemental borax storage system would not increase the consequences of these types of accidents, since the borax mixing system and the ice machines are not utilized in the mitigation of these accidents. The TM did not adversely affect any equipment considered important to safety, or interfere with the function of equipment important to safety. This temporary modification did not adversely impact the function or design basis of any structure, system or component important to safety as described in the UFSAR.

Document No: TM-12-98-18

Title: Temporary Modification - Install Temporary Ice Reloading System

*Description of Change:*

The TM installs a temporary ice reloading system to facilitate the refilling of the ice condenser ice baskets. The temporary system includes one 12" auger (screw conveyor), and two 9" augers to transport pre-made ice and the installation of a hopper in the Auxiliary Building (A/B) crane bay. The pre-made ice, which is sealed in plastic bags and stored in an off-site storage facility, is transported to the A/B crane bay, where it is loaded into the hopper and carried by the auger tubes to a chilled blower system.

*SE Summary:*

The change was reviewed and determined not to constitute an unreviewed safety question. The ice-making and distribution system is non-safety related, and as such the independent ice distribution system installed via this TM is also non-safety related. The pre-made ice transported to the Ice Condenser for refilling ice baskets is a part of the accident mitigation system and not an accident initiator. This temporary ice reload installation is an independent ice transporting system, which does not have any interface with any safety-related SSC. In the areas and locations where ice spill could adversely impact safety-related SSC's, ice spill containment (tarp and/or barrier) are provided such that the safety-related SSC's are not adversely impacted. The pre-made ice was verified to be clean and there are no radiological hazards associated with this ice. The change is a part of an accident mitigation system and by itself cannot cause an accident of any kind. The proposed change is associated with a non-safety-related ice distribution system and is not within the scope of any limited conditions defined by the Technical Specifications.



Document No: TM-12-98-20

Title: Temporary Modification - Install Ice Reloading System

*Description of Change:*

The TM installed a temporary ice reloading system to facilitate the refilling of the ice condenser ice baskets. The temporary system included one 12" auger (screw conveyor) and two 9" augers to transport pre-made ice, to be brought into the Auxiliary Building crane bay, to a chilled blower system. This TM encompassed TM-12-98-18, and added a compressed air vortex tube for supplemental blower cooling and relocated the two compressors from the Unit 1 4kV roof to the walkway above the auxiliary Building crane bay.

*SE Summary:*

This TM was reviewed and determined not to create an unreviewed safety question. The change installed a temporary non-safety related and an independent ice transportation system. The temporary screw conveyors were seismically supported in the auxiliary building; the flex hose was adequately restrained; and spill containment was provided in critical areas so that components important to safety would not be impacted during a seismic event. This design methodology would eliminate the possibility of adverse interaction with and potential failures of safety-related SSCs. There is, as such, no increase in the probability of an accident and/or the consequences of an accident.

Document No: TM-12-98-21

Title: Temporary Modification to Install Fire Protection Freeze Seal

*Description of Change:*

This TM established a temporary freeze seal on a section of 10-inch piping downstream of valve 12-FP-660, on the discharge of the east engine driven fire pump, 12-PP-145E. The purpose of the freeze seal was to isolate 12-FP-661, to perform maintenance on this damaged fire protection valve.

*SE Summary:*

The change was reviewed and determined not to constitute an unreviewed safety question. The establishment of a freeze seal on the 10" fire protection line on the discharge of the east engine-driven fire pump allowed replacement of valve 12-FP-661. The change was associated with a non-safety related fire protection system. It was determined that the TM could not initiate any accident previously evaluated in the UFSAR. This fire protection line is not relied upon for the mitigation of any accident previously evaluated in the UFSAR. No failure mode was created that can be postulated to cause a malfunction of equipment important to safety different than those previously analyzed in the UFSAR. There is, as such, no increase in the probability of an accident and/or the consequences of an accident. The fire protection system is no longer included in the Technical Specifications, although it is included in the Administrative Technical Requirements. The TM provided an alternative fire water supply, as required by the Administrative Technical Requirements.

Document No: TM-12-98-24

Title: Temporary Modification to Install a Temporary Ice Bucket Storage Rack in the Upper Containment

*Description of Change:*

This Temporary Modification installed a temporary ice bucket storage rack in the upper containment on top of the pressurizer enclosure and steam generator enclosure at the 695' elevation. The temporary storage rack was used in the ice bucket rebuilding/fabrication process. Ice buckets were removed from the ice condenser and stored vertically in the temporary storage rack until they were individually rebuilt or replaced. The completed ice buckets were installed in the ice condenser. This temporary storage and processing on the 695' elevation eliminated lowering the ice buckets to the 652' elevation where storage and working space is limited. The temporary storage racks were removed prior to declaring the ice condenser operable.

*SE Summary:*

This Temporary Modification was reviewed and determined not to constitute an unreviewed safety question. This temporary storage rack to handle ice buckets was designed to meet UFSAR Design Basis requirements to withstand a seismic event and was restrained appropriately. The use of a temporary ice bucket storage rack did not impact the UFSAR, Technical Specifications, existing procedures or plans.

Document No: TM-12-98-28

Title: Temporary Modification - Install a Temporary Ice Reload System

*Description of Change:*

This TM safety evaluation is only applicable for reloading ice into the ice condensers while both units are shutdown in Modes 5 or 6. The TM installed a temporary ice reloading system to facilitate refilling the ice condenser ice baskets. The temporary system included one 12" auger (screw conveyor) and two 9" augers. This equipment transported pre-made ice from the Auxiliary Building crane bay to a chilled blower system. This temporary modification superceded TM-12-98-20.

*SE Summary:*

The change was reviewed and determined not to constitute an unreviewed safety question. The original plant condition was restored after the completion of the work associated with the TM. The change is associated with a non-safety related independent ice transportation system. The temporary ice pulverizer, compressors, blower units, and screw conveyors were seismically supported in the auxiliary building, the flex hose was adequately restrained, and spill containment was provided in critical areas to ensure components important to safety were not impacted. This design methodology eliminated the possibility of adverse interaction with, and potential failures of safety related components. There is, as such, no increase in the probability of an accident and/or the consequences of an accident.





**Document No:** TM-12-98-34

**Title:** Temporary Modification - Block Off the Outdoor Air Supply to the Cold Chemistry Laboratory Air Conditioning Unit

**Description of Change:**

This Temporary Modification blocked off part of the outdoor air supply to the air conditioning unit serving the Cold Chemistry Lab located on EL. 633 of the Turbine Building during the winter months. The Temporary Modification blocked off approximately 25% of the air intake. Blocking part of the outdoor air prevented freezing and rupture of the air conditioning cooling coil.

**SE Summary:**

This Temporary Modification was reviewed and determined not to constitute an unreviewed safety question. The Turbine Building, Cold Chemistry Lab, and air conditioning system for the Cold Chemistry lab are not safety related and are not part of the air conditioning system for the Control Room or Auxiliary Building. The Temporary Modification did not require revisions to any procedures, Plans, Technical Specifications or FSAR.

**Document No:** CE-96-0012 & 1&2 EHP 4030 STP.203, R3C4

**Title:** Replace CLV Drain Isolation Valves & Revise Type B And C Leak Rate Test

**Description of Change:**

Component Evaluation No. CE-96-0012 replaced each Containment Ventilation Unit Drain Header to Rad. Waste Holdup Tanks Train 'A' ('B') Containment Isolation Valve. The existing globe valves were replaced with ball valves. Associated LLRT procedures were changed to test the valves in the same direction as the pressure existing when the valve performs its containment isolation function.

**SE Summary:**

This change was reviewed and determined not to constitute an unreviewed safety question. Accidents could not be initiated by failure of these containment isolation valves. The section of pipe on either side of these valves is seismic class III. This piping is not safety-related and performs no safety function. The replacement valves are capable of mitigating the consequences of a LOCA or SLB inside containment as demonstrated by the results of test procedures. The changes to the test procedures do not change the acceptance criteria for the tests. The component evaluation and the changes to the procedures do not affect the source term, release path, or frequency of release for accidents. The replacement valves are designed to function as assumed in the accident analysis. None of the changes to the valves or procedures including the proceduralized temporary installation of a blank flange, affects any of the margins of safety defined in the Technical Specifications bases.



*Document No:* CE-97-0234, Revision 0

*Title:* Replacement of Control Cable 2-12238-2 for 2-DLS 407

*Description of Change:*

This change allowed replacement of control cable 2-12238-2 for 2-DLS-407 (Main Steam Leads Condensation Drain Tank TK-150 High Level Switch) with one having a higher temperature rating on Unit 2. The new cable has an insulation rating of 200 degrees Celsius versus 90 degrees Celsius for the existing cable.

*SE Summary:*

This change was reviewed and determined not to constitute an unreviewed safety question. The bases for this determination is that the UFSAR did not contain a reference to the level switch, the affected cable was not part of a protective system, and it did not serve a component that was vital or installed in the control room. In addition, the change did not affect any safety analyses or technical specifications, and the cable and associated equipment do not serve a safety function and are not required for accident mitigation.

*Document No:* CE-98-010, Rev. 1

*Title:* Component Evaluation - Replacement of Fuse Block in 600 Volt Switchgear Breaker 12-SCC-E2

*Description of Change:*

This safety evaluation addressed replacement of the fuse block for 600 Volt Switchgear breaker 12-SCC-E2. Each 600 volt switchgear breaker has a fuse and fuse block, which provide the control power isolation and protection for the control circuits of the switchgear breaker. The plastic body of these fuse blocks had cracked due to a combination of age and mechanical stress and thus required replacement. Switchgear breaker 12-SCC-E2 connects the security diesel generator to bus 12-SCC.

*SE Summary:*

This change was reviewed and determined not to constitute an unreviewed safety question. The plant security bus has its own power supplies and is not required to mitigate design basis accidents or to achieve safe shutdown conditions. The accident analyses neither, nor credit, the operation of the plant security bus 12SCC. It was determined that replacement of the fuse blocks for 600 volt switchgear breaker 12-SCC-E2 would not change the function of the breaker nor alter plant security effectiveness. Failure of breaker 12-SCC-E2 and bus 12-SCC are not considered credible accident initiators. This change does not increase the probability or consequences of any accident previously evaluated in the UFSAR, nor does this change impact plant Technical Specifications, or the health and safety of the public.



**Document No:** 02 OHP SP.180, Revision 0

**Title:** Operation of the Ice Melt Water Removal System

**Description of Change:**

Procedure 02-OHP SP.180, Revision 0, "Operation of the Ice Melt Water Removal System," has been developed to address the need to melt, drain, and release all of the ice in the unit 2 ice condenser so that each ice basket may be refilled with fresh ice. This was done to correct deficiencies found in the condition of the ice in the ice condenser during inspections conducted in association with our recent AE inspection and to prevent any potential impact due to foreign materials in the ice discovered in inspections conducted by AEP. This procedure will provide steps to transfer the melted ice from the ice condenser to the FRAC tanks and pumps located outside the Auxiliary Building, and then to the monitor tanks where it will be sampled and analyzed prior to release to the lake.

**SE Summary:**

This change was reviewed and determined not to constitute an unreviewed safety question. Since the capability to drain and direct ice melt on a large scale to locations other than containment is a Temporary Modification and is addressed on a per-use-of-procedure basis, there is no requirement or need to update UFSAR Section 5.3 to reflect this option. There is also no affect on the Technical Specifications. Safety Evaluation of procedure 01-OHP SP.177 was determined to this procedure as well. This procedure merely changes the unit and applicable valve designations. The unreviewed safety question determination remains the same.

**Document No:** 12 PMP 4050.CHL.001, Rev. 0

**Title:** Control of Heavy Loads

**Description of Change:**

Procedure 12 PMP 4050.CHL.001 provides guidance on control of heavy loads in the plant where applicable procedures do not already exist. This procedure includes the requirements of NUREG-0612, Control of Heavy Loads at Nuclear Power Plants.

During a self-assessment of the control of loads it was identified that the existing procedure did not define the commitments and clarifications provided in AEP submittals to the NRC on this subject. A recommendation was made to revise and update existing procedures to include the applicable findings of the self-assessment report. AEP procedure 12 PMP 4050.CHL.001, Rev. 0 supercedes the previous AEP procedures.

**SE Summary:**

The change was reviewed and determined not to constitute an unreviewed safety question. The new procedure does not change the existing heavy load control requirements nor does it create any new release paths or increase the source terms or release durations.



**Document No:** 12 PMP 4050.CHL.001, Rev. No. 1

**Title:** Control of Heavy Loads in the Auxiliary Building and Over the SFP Racks

**Description of Change:**

The issuance of the new procedure, 12 PMP 4050.CHL.001, improved the handling of heavy loads by consolidating the existing heavy load program documents into a single, plant-wide document. The procedure provides programmatic instructions to ensure compliance with the commitments made in response to NRC NUREG-0612. This change adds a commitment for a Plant Manager procedure for control of heavy loads that addresses the ANSI B30.2 criteria on operator training and also addresses crane inspection, testing, and maintenance.

**SE Summary:**

The change was reviewed and determined not to constitute an unreviewed safety question. The consolidation and enhancement of procedural instructions is not an accident initiator of itself, nor would it increase the radiological source term, the magnitude and/or frequency of releases, or affect the release path for any accident. The procedure will not change the design configuration of the equipment and will not downgrade performance or redundancy of plant load-handling equipment. This activity will not modify any load handling equipment nor alter the plant design configuration. The enhancements made in the procedure will continue to ensure that T/S requirements are met. The change does not represent a reduction in commitments, and therefore does not impact the analyses in the UFSAR.

**Document No:** 12 PMP 7030 CAG.001

**Title:** Condition Assessment Group

**Description of Change:**

The change involved a revision to 12 PMP 7030.CAG.001, "Condition Assessment Group," to modify the process for evaluation of condition reports and establish a new criteria of condition report, referred to as conditions not adverse to quality (CNAQ). A safety evaluation was performed, because 10 CFR Part 50, Appendix B does not address conditions that are not adverse to quality.

**SE Summary:**

The change was reviewed and determined not to constitute an unreviewed safety question. It is an administrative change to the corrective action program. The change does not affect programs or licensing commitments for our corrective action program, identification of significant conditions or conditions adverse to quality, or the review and evaluation of commitments for those programs. In particular, the creation of a "Condition Not Adverse to Quality" increases our ability to track conditions that are not addressed by existing programs or commitments. This procedure revision did not affect our current licensing basis, either implicitly or explicitly.





**Document No:** PMP 2080 EPP.106, Rev. 12

**Title:** Initial Offsite Notification - Units 1 & 2

**Description of Change:**

This change revised procedure PMP 2080 EPP.106, Rev. 12, Initial Offsite Notification by incorporating administrative changes to update Emergency Response Organization (ERO) positions, titles, names and phone numbers. This change alters the titles referenced in the Emergency Plan to fill the positions of Site Emergency Coordinator. The position of Training Superintendent will now be listed as being qualified to fill the position of Site Emergency Coordinator with this revision.

**SE Summary:**

The change was reviewed and determined not to constitute an unreviewed safety question. Administrative changes or information (positions, titles, names, and phone numbers) updates to this procedure would not increase the radiological source term, introduce accident initiators, or impact the results of any previously analyzed accident. This revision changed the positions that are qualified to fill the position of Site Emergency Coordinator. It does not affect any accident analysis in the UFSAR, the Security Plan or the Quality Assurance Program Document (QAPD). No Technical Specification bases are altered by this procedural revision.

**Document No:** PMP 2081 EPP.302, Rev. 6

**Title:** EOF Communications

**Description of Change:**

This activity implemented an editorial change to correct the phone number for the American Nuclear Insurer (ANI) in Figure 12-12 and page 12.3-68 of the Emergency Plan. This change was prompted by a revision to PMP 2081 EPP.302, Rev. 6, "EOF Communications," that reflected the new EOF in Buchanan and revised outdated phone and fax numbers.

**SE Summary:**

The activity was reviewed and determined not to constitute an unreviewed safety question. An editorial change to the Emergency Plan cannot affect any accident initiators or challenge the performance or function of any safety systems. The editorial change would not affect any release paths, frequencies, or source terms, nor would it introduce or affect any plant failure modes, accident initiators, or radiological consequences. This activity does not affect any Technical Specifications or their bases.



Document No: 01 (02) OHP 4021.051.008, Revision 0

Title: Steam Generator Nitrogen Operations

*Description of Change:*

The guidance associated with steam generator nitrogen operations during Modes 5 or 6 had been contained in two separate procedures. This change created a steam generator nitrogen operations procedure that combined the guidance into one procedure for each unit. The procedure includes extensive valve line-ups which provide a means to ensure the expected plant condition are in place prior to performing steam generator nitrogen operations.

*SE Summary:*

The change was reviewed and determined not to constitute an unreviewed safety question. Steam generator nitrogen operations, which are restricted to Modes 5 or 6, will not increase the probability of occurrence of an accident. Accidents explicitly analyzed for Modes 5 and 6 are unaffected by steam generator nitrogen operations. UFSAR Chapter 14.2.2 and 14.2.3, Accidental Release of Radioactive Liquids and Accidental Waste Gas Release, respectively, are also not impacted by steam generator nitrogen operations. Sparging is restricted to Mode 5 and 6 plant conditions, with the reactor coolant system (RCS) degassed, cooled down, depressurized to less than 400 psi, and aligned to the residual heat removal (RHR) system. Thus, there is no radioactive source term is present in these Modes. Performing nitrogen operations to support wet layup of the steam generators would not result in degradation below the design basis, or increase challenges to the safety systems required for Modes 5 or 6. Applying nitrogen to the steam generators during Modes 5 or 6 for sparging, or to establish an inert atmosphere while in wet layup, does not impact equipment important to safety. Nitrogen operations associated with the steam generators as prescribed in procedure 01 (02) OHP 4021.051.008 will not reduce the margin of safety as defined in the basis for any technical specification.

Document No: 01 (02) OHP 4022.002.015, Rev. 4

Title: Shutdown LOCA

*Description of Change:*

This activity revised OHP-4022.002.015, Shutdown LOCA, to ensure adequate Net Positive Suction Head to the RHR pumps in Mode 4. The change addressed the concern that a unit on RHR cooling in Mode 4 will have water with an elevated temperature in the RHR pump suction. In that case, the water would flash if the RHR pump is switched to a low pressure suction source such the Refueling Water Storage Tank or the containment sump. The Shutdown LOCA procedure change addresses the problem of hot water in the RHR pump suction by providing for depressurization of the RHR pump suction lines, thereby preventing the occurrence of flashing and subsequent pump damage, and ensuring the pumps will be available for cold leg recirculation.

*SE Summary:*

The change was reviewed and determined not to constitute an unreviewed safety question. Enhancement of the Shutdown LOCA procedure does not increase the radiological source term, is not an accident initiator, and does not impact the results of any previously analyzed accident. No new accident initiators are created. The procedure and its modifications address mitigation and are not related to initiation of a LOCA or any other UFSAR accident. The revised procedure provides a method of preventing equipment malfunction by ensuring that the RHR pumps are available for recirculation, following a Mode 4 LOCA. Since the RHR pumps are pulled to lock out while the suction piping is depressurized, they will not be damaged. No other equipment will be affected. The procedure improves the response to a Mode 4 LOCA and ensures that the analyzed accidents remain bounding. The change ensures the safety margin in the Bases of Technical Specification 3.5.3, ECCS Subsystems - Tavg <350F, will be maintained.

*Document No:* 01 (02) OHP 4030.STP.054E & 01 (02) OHP 4030.STP.054W

*Title:* NE Temporary Modification Tracking No. 12-TM-100698

*Description of Change:*

These proceduralized temporary modifications installed additional pressure gauges on the suction and/or discharge headers of the Residual Heat Removal (RHR) pumps. These temporary gauges were installed to ensure the pump performance is within limits to prevent dead heading during surveillance testing.

These temporary modifications were included in the following procedures:

- 01-OHP 4030.STP.054W (West RHR Train Operability Test-Shutdown)
- 02-OHP 4030.STP.054W (West RHR Train Operability Test-Shutdown)
- 01-OHP 4030.STP.054E (East RHR Train Operability Test-Shutdown)
- 02-OHP 4030.STP.054E (East RHR Train Operability Test-Shutdown)

*SE Summary:*

The change was reviewed and determined not to constitute an unreviewed safety question. The change installed additional pressure gauges at the suction and/or discharge of each RHR pump for the purpose of precisely measuring pump pressure to prevent dead heading against the other RHR pump through a cross tie connection during surveillance testing. The section of instrument tubing is safety related and Seismic Class I. The weight of the pressure gauges are minimal (approximately 4 lbs. each), and based upon a seismic evaluation, the proposed temporary pressure gauges installed at these locations will not adversely impact any safety-related SSC's in the vicinity. This temporary modification cannot initiate an accident previously evaluated in the UFSAR since failure of this TM on this portion of piping will not impact the operation or function of the RHR system.

*Document No:* 01 OHP 4021.003.001 and 01 OHP 4030.STP.002V

*Title:* 1-OHP 4021.003.001, Rev. 20, Letdown, Charging and Seal Water  
Operation and 01-OHP 4030.STP.002V, Rev. 6, Boration System  
Position Verification and Testing

*Description of Change:*

The Unit 1 Centrifugal Charging Pumps (CCPs) Flow Control Valve, 1-QRV-251, was identified as being degraded such that it will not control charging flow satisfactorily to maintain reactor coolant pump (RCP) seal injection flow within the limits described in the normal operating procedures. As a short-term response to this degraded condition, the inlet valve, 1-CS-302, which is upstream of the CCPs Flow Control Valve (1-QRV-251), will be throttled while the work scope is defined and the necessary repairs are made to degraded valve 1-QRV-251. This is a temporary alignment that is limited to MODE 5 or 6, until valve 1-QRV-251 can be repaired.

*SE Summary:*

The change was reviewed and determined not to constitute an unreviewed safety question. The inlet valve, 1-CS-302, to CCPs Flow Control Valve 1 QRV-251 is being throttled to regulate flow while degraded valve 1-QRV-251 is repaired. The safety review addresses manually controlling the flow rate from the CCPs via 1-CS-302 in lieu of automatically controlling the flow rate via degraded valve 1-QRV-251, and the associated changes to procedures 01-OHP4021.003.001 and 01-OHP 4030.STP.002V. No unreviewed safety question has been determined to exist since 1-CS-302 will be performing the function of 1-QRV-251, and no branch lines will be exposed to unthrottled CCP flow that is normally controlled by 1-QRV-251. The availability of adequate boric acid is assured by the note for Step 4.5.2 of 01-OHP 4021.003.001.

Document No: 01 OHP 4021.003.005, Rev. 11, Change 3

Title: Reactor Coolant System Degassing

*Description of Change:*

The change revised procedure 01 OHP 4021.003.005 to allow noncondensable gases to be removed from the pressurizer. The change involves using the nuclear sampling system as a vent system to purge the pressurizer steam space. This change is to ensure that the venting is done in a controlled manner for the conditions existing in Mode 5. The normal vent path for purging the non-condensable gases from the pressurizer steam space is via the pressurizer power operated relief valve to the pressurizer relief tank and finally to the gas decay tank. The associated UFSAR change allows venting the gases from the pressurizer to the gas decay tanks using the nuclear sampling system during Mode 5 operation.

*SE Summary:*

This change was reviewed and determined not to constitute an unreviewed safety question. Using the pressurizer steam space sampling line to provide a vent flow path is similar to obtaining grab samples using the same flow path. This has already been evaluated for the UFSAR. Abnormal events postulated in the UFSAR are not applicable since this procedure only applies to mode 5 operation. Moreover, mitigating measures including isolation of branch lines and leak detection will be available during the venting process.





Document No: 01 OHP 4021.017.001, & 02 OHP 4021.017.001

Title: Operation of Residual Heat Removal System

*Description of Change:*

This change provided for an alternate makeup path from the refueling water storage tank through the residual heat removal system, to the reactor coolant system. This alternate makeup path allows the normal makeup path through the charging pumps to be removed from service in order to conduct maintenance activity on leaking chemical and volume control system valves while in Modes 5 or 6.

*SE Summary:*

The change was reviewed and determined not to constitute an unreviewed safety question. Protection against the occurrence of accidents evaluated in the UFSAR is provided by this change that is equivalent to that represented in the UFSAR. The path from the refueling water storage tank through valve IMO-390 to the reactor coolant system is present when the reactor cavity is being filled from the refueling water storage tank through the reactor coolant system. The requirement that valve ICM-129 remain without control power and the requirement that valve IMO-390 be open and without control power before valve ICM-129 is throttled, provides assurance that the proposed activity will not increase the probability of a malfunction of a residual heat removal pump, since the available suction source for the pump will be equivalent to that provided with valve ICM-129 locked fully open as described in UFSAR. Any consequences of a malfunction of equipment important to safety are already bounded by other configurations recognized in the UFSAR. This configuration is bounded by the configuration when the reactor cavity is being filled during refueling operations, as discussed in Section 9.3.2 of the UFSAR. The Required Actions of TS 3.1.2.1 and 3.1.2.3 for when no charging flow path is available are met in that the refueling water storage tank is operable with at least 2400 ppm of boron and there are no core alterations and no positive reactivity changes in progress.

Document No: 01 OHP 4021.018.008, Rev. 3, Change Sheet 5

Title: Operation of Refueling Water Storage Tank Support Systems

*Description of Change:*

The change to procedure 01-OHP 402 1.018.008 addresses the operation of the refueling water purification pump. To establish a minimum flowrate of 75 gpm when aligned to the spent fuel pit demineralizer. The minimum flowrate for long-term cleanup was also established at 90 gpm, guidance was added to the procedure for cases when flow drops below the minimum specified values.

*SE Summary:*

The change was reviewed and determined not to constitute an unreviewed safety question. The change to procedure 01-OHP 4021.018.008 provides operational limits for refueling water purification pump minimum flow. The refueling water purification pump is not an accident initiator, is not used to mitigate the consequences of any accident, and is not required operable by the Technical Specifications. No changes are required to the UFSAR or the Technical Specifications for this change.

*Document No:* 01 OHP 4021.028.001, Rev. 6

*Title:* Containment Ventilation

*Description of Change:*

The Containment Ventilation procedure was changed to maintain the upper containment temperature between from 65 degrees and 90 degrees and the lower containment temperature between from 65 degrees and 110 degrees, when operating in Modes 5 and 6. This procedure change allows for operation of both Upper Containment Ventilation, Instrument Room, and Lower Containment Ventilation units in auto, or in manual with more frequent monitoring than required by STP.030. Manual operation will allow containment to be cooled for both habitability and to aid in ice condenser cool down and dehumidification following ice basket repairs.

*SE Summary:*

The procedure change was reviewed and determined not to constitute an unreviewed safety question. No new credible release paths have been created by the manual operation of the NESW regulating valves. More importantly, from a containment integrity point of view, LOCA and steam line break are of concern. However, these accidents cannot occur in modes 5 and 6. Thus the procedure change cannot increase the consequences of credible modes 5 and 6 accidents analyzed. The procedure assures that the containment temperature will be maintained above 65 degrees. Manual operation of the NESW regulating valves will also assure the proper containment temperature since the procedure requires temperature monitoring every 3 hours. Since the temperature will be maintained above the design basis minimum temperature of 60 degrees, there is no impact on reactor vessel or other components. The procedure changes have no adverse impact on the functionality of equipment that is important to safety since the containment temperature is maintained within Technical Specification limits.



Document No: 01 OHP 4021.057.001

**Title:** Proceduralized Temporary Modification - Install a Temporary Source of Cooling Water (Non-Essential Service Water) to the Office Building Circulating Water System

**Description of Change:**

This proceduralized temporary modification addresses installation of a temporary source of cooling water for the D.C. Cook Office Building heating, ventilation, and cooling system. This temporary modification includes use of a fire hose to make a temporary connection between the common sealing and cooling water system and the non-essential service water system to the discharge of the Unit 1 circulating water pumps. The connections are made at valves 12-NSW-496 and 12-CW-307, using 2 ½ inch fire hoses.

**SE Summary:**

The change was reviewed and determined not to constitute an unreviewed safety question. The temporary connection of non-essential service water and sealing and cooling system water to office building circulating water system is not associated with nuclear safety nor does it adversely impact any component or equipment important to safety. The systems involved are not involved in initiation of an accident that poses a threat to the health and safety of the public. The hose is routed so that the flow of water from this hose connection, should it be severed at any point, does not impact any safety related systems structures or components or any other items that might be considered an initiator of an evaluated accident. System malfunction by pipe (and therefore by hose) break, and subsequent flooding, has already been considered to a greater magnitude than the proposed temporary modification could create. Finally, because the connections are to 2 ½" diameter valves, the maximum water that could occur from a break in this hose would not impact any safety-related equipment. This possible accident scenario and the associated flooding in the Turbine Building is not an accident of a different type and is enveloped by the accident conditions already evaluated in the UFSAR. The change does not create any new type of failure mode and additionally does not interface with any safety-related equipment. the temporary modification has no impact to the limiting conditions of operation, surveillance requirements or basis stated in the Technical Specifications in the safety evaluation report, or in any other portion of the complete UFSAR.



Document No: 01 OHP 4021.057.001 (R-15, C-2) & 02 OHP 4021.057.001 (R-14, C-1)

Title: Circulating Water System Operation for Ice Control in the Forebay

*Description of Change:*

An attachment was added to 01-OHP-4021.057.001 (R-15, C-2) and 02-OHP 4021.057.001 (R-14, C-1) to allow the circulation of water from the discharge pipes directly to the forebay through valves 1-WMO-17 and/or 2-WMO-27. The objective of the change was to provide a means of raising the temperature in the intake forebay during winter conditions when both units are shutdown and the normal de-icing procedures are not effective.

*SE Summary:*

This change was reviewed and determined not to constitute an unreviewed safety question. Procedures 01-OHP-4021.057.001 (R-15, C-2) and 02-OHP 4021.057.001 (R-14, C-1) support the operation of the CWS. The proposed changes help support de-icing in the forebay. The safety evaluation concluded that the proposed changes did not increase the probability or consequences of an accident or malfunction and did not reduce the margin of safety. The changes did not affect the functionality of the circulating water system, ESW, or NESW systems in any way.

Document No: 01 OHP 4024.104, R11 S8 AND 02 OHP 4024.204. R5 S7

Title: Annunciator # 104 (204) Response: Essential Service Water and Component Cooling

*Description of Change:*

DCP-870 installed a backup air supply for the operators to connect to the ESW strainer backwash inlet and outlet valves in the event of loss of control air. The change to procedures added to the Subsequent Action to Drops 55 and 6: to perform the manual backwash of the essential service water (ESW) strainers in the event that control air is unavailable and one of the strainers has a differential pressure greater than 85 inches of water.

*SE Summary:*

The change was reviewed and determined not to constitute an unreviewed safety question. The operators had safety-related instrumentation available that could have been used to identify a local failure of the control air system and to verify that manual backwash is successfully completed. The performance of the ESW system was not negatively impacted by the implementation of this procedure change. The ESW system capability as a primary heat sink for removal of heat from the CCW system, containment spray system, control room HVAC system and emergency diesel generators was not degraded. If a manual backwashing of a strainer had failed to adequately reduce the differential pressure, local safety-related instrumentation of differential pressure would indicate the need to re-perform the procedure. Thus, the proposed procedure change will provide a backup means to address this system malfunction and attempt to return the standby strainer to a clean condition. The change provided mitigative steps to take in response to a loss of control air that could prevent normal ESW strainer backwash capability.

Document No: 01 OHP SP.163, Rev. 1

Title: Isolation and Restoration of the Containment 85 psig and/or 50 psig Control Air Headers.

*Description of Change:*

This proceduralized temporary modification was developed in support of taking the containment control air headers out of service. One proceduralized temporary modification allows connecting temporary hose from the piping connection downstream of valve 1-CA-9 to piping connections downstream of valves 1-CA-761 and 1-CA-762. The purpose of this connection is to provide an alternate air supply to Pressurizer PORVs 1-NRV-152 and 1-NRV-153, respectively. Based on an identical temporary modification implemented in October 1997 and its respective safety review, no further 10CFR50.59 safety review of this temporary modification was required. This was reported in the D. C. Cook 1997 annual 10CFR50.59 report as TM 01-TM-97-39.

A second proceduralized temporary modification provides instructions for installation of stem blocks to 1-VCR-11 and 1-VCR-21 if the Glycol Chillers and pumps remain in service during performance of this procedure. This will mechanically block open these valves to allow the flow of glycol into and return from containment. This PTM was developed due to the projected increased personnel traffic into and out of the ice condenser. Both proceduralized temporary modifications are only to be performed when the unit was in Mode 5. A summary of the safety evaluation performed for this second PTM is provided below.

*SE Summary:*

This change has been reviewed and determined not to constitute an unreviewed safety question. 01 OHP SP.163, Rev 1 allows blocking open the glycol supply and return valves to Containment (1-VCR-11 and 1-VCR-21) to provide continued operation of the Glycol Chillers as Ice Condenser cooling needs dictate. This proceduralized temporary modification will only be performed with the plant in Mode 5. These valves allow glycol to be fed to each reactor containment by single flow and return pipes and subsequently by branch feed and return lines to the air handling units along each side of the ice condenser plenum. The glycol floor cooling circuit is entirely within the containment and consists of two floor cooling pumps circulating chilled glycol through coils embedded in the ice compartment floor. The floor cooling pumps take suction from the air handler glycol return line before the line leaves the containment. Glycol from the floor cooling circuit is resumed to the same line, downstream of the suction point, through a modulating valve for floor temperature control.

Neither the failure of the glycol system nor the blocking open of the glycol valves will increase the probability of an accident previously evaluated in the UFSAR. These valves are containment isolation valves, which are required to be operable while the unit is in Modes 1, 2, 3, and 4. Allowing use of this temporary modification with the plant in Mode 5 will not result in an increase in the consequences of any accident previously evaluated. Upon restoration of these valves to normal operation, stroke testing required by procedure to ensure their functionality and operability has not been degraded. The PTM will not degrade or prevent actions described or assumed in the UFSAR nor alter any assumptions previously made in evaluating the radiological consequences of an accident described in the UFSAR. No new seismic or other types of failures will be introduced which could be postulated to

initiate an accident of a different type than any previously evaluated in the UFSAR.

*Document No:* 01 OHP SP.177, REV. 0

*Title:* Operation of the Ice Melt Water Removal System

*Description of Change:*

Procedure 01-OHP SP.177, Revision 0, "Operation of the Ice Melt Water Removal System" was developed and issued to address the need to melt, drain and release all of the ice in the unit 1 ice condenser so that each ice basket may be refilled with fresh ice. This procedure provides steps to transfer the melted ice from the ice condenser to the FRAC tanks and pumps located outside the Auxiliary Building, and then to the monitor tanks where it will be sampled and analyzed prior to release to the lake.

*SE Summary:*

This change was reviewed and determined not to constitute an unreviewed safety question. This change addressed the transporting of ice melt while the unit is in Modes 5 and 6 and did not affect any accident or transient initiators. This change did not affect the release paths, the frequency of release or the source term for release for any accidents previously evaluated in the UFSAR. The transport of the melted ice to the FRAC tanks and then to the monitor tanks to be properly sampled and released would not increase the consequences of any UFSAR accident analysis. No new credible release paths were created by this procedure as delineated above. The estimated radiological consequences to the environment of releasing all 350,000 gallons of ice melt to the environment would be  $2.2 \text{ E-04 mrem}$  which is much less than any the radiological consequence limit for any analyzed accident. This procedure addresses the transport of ice melt through drain lines in containment that do not interface with the RCS or the fuel handling system. This procedure applies while in Modes 5 and 6 when the ice condenser is not required to be operational per Technical Specification 3/4.6.5. This procedure operates portions of the plant drainage and waste disposal systems as designed and within its design basis. Potential pipe leakage and ruptures are not malfunctions of equipment important to safety or malfunctions of a different type. The procedure changes did not affect any Technical Specifications or their bases.





*Document No:* 01 OHP SP.181, Rev. 0

*Title:* Biocide Treatment of Unit 1 Non-Essential Service Water System

*Description of Change:*

The objective of the initial issuance of procedure 01-OHP SP.181, Rev. 0, was to support biocide treatment of the Cook Unit 1 Non-Essential Service Water (NESW) system. The procedure aligned each unit to supply its own NESW via the intake and discharge tunnels on Unit 1 and the intake tunnel on Unit 2. Upon completion of the biocide treatment procedure, the NESW system was restored to the desired alignment.

*SE Summary:*

This change was reviewed and determined not to constitute an unreviewed safety question. The procedure issuance supported biocide treatment of the Unit 1 NESW system. The safety evaluation concluded that the proposed changes did not increase the probability or consequences of an accident or malfunction and did not reduce the margin of safety. The changes did not affect the functionality of the circulating water system, ESW, or NESW systems in any way. There were no changes to the UFSAR or the Technical Specifications required for implementation of this change.

*Document No:* 01 OHP SP.203, Rev. 0

*Title:* Shifting Charging Flow Control To and From Alternate Flow Path

*Description of Change:*

Special procedure 01-OHP SP.203, "Shifting Charging Flow Control to and from Alternate Flow Path," allows 1-QRV-251 to be removed from service for repairs. The alternate flow path diverts centrifugal charging pump (CCP) discharge flow from the valve to be repaired, beginning upstream of CCP discharge valves 1-CS-301E and W by passing flow through normally closed valves 1-CS-300E and W. The charging and RCP seal injection flow under this configuration bypasses flow indication 1-QFI-200. This flow configuration is limited to MODES 5 or 6, while valve 1-QRV-251 is repaired.

The safety review addresses Chemical and Volume Control System (CVCS) operation via an alternate flow path, where charging flow from the CCPs is manually controlled by either 1-CS-300E or W and 1-QRV-200. Flow is further adjusted via RCP seal injection throttling valves, 1-CS-438-1 through -4, as described in special procedure 01-OHP SP.203.

*SE Summary:*

This change has been reviewed and determined not to constitute an unreviewed safety question. This special procedure was developed to provide guidance for operation of the CVCS System using an alternate charging flow path to the RCS in order to permit maintenance on the Charging Flow Control Valve, 1-QRV-251. The probability of an accident previously evaluated in the UFSAR is not increased, as the units are both in MODE 5, and the only relevant accident to MODES 5 and 6 is CVCS Malfunction, which is prevented by a clearance on all RCS dilution flow paths. The proposed changes have no direct impact on the consequences of an accident. Using the manual valves in place of the normally-used automatic flow control valve 1-QRV-251 to maintain CCPs flow rate for RCP seal injection and normal charging flow will not result in degradation below the design basis or increase challenges to the safety systems required for MODES 5 or 6. This alternate line-up is only applicable to MODES 5 or 6 while 1-QRV-251 is taken out of service for repairs.



Document No: 02 OHP 4021.003.001, Rev. 12, Change No. 11

Title: Letdown, Charging and Seal Water Operation

*Description of Change:*

Changes were made to Procedure No. 02-OHP 4021.003.001, "Letdown, Charging and Seal Water Operation," to add further cautions, explanatory information, and steps for placing additional letdown orifices in service, for placing in and removing from service the excess letdown, and for re-establishing normal letdown.

*SE Summary:*

This change was reviewed and determined not to constitute an unreviewed safety question. Extended operation or changes in RCS boron concentration with excess letdown in service may create a difference in the boron concentrations between the RCS and the VCT. While excess letdown is in service, the letdown flow bypasses the VCT and the boron concentration of the two volumes may not remain equal. The option to route excess letdown through the VCT has been removed from the procedure. When normal letdown is re-established, relatively dilute boric acid from the VCT may enter the RCS causing a boron dilution event. However, the bounding analysis described in the UFSAR considers un-borated reactor coolant makeup water being added at a maximum rate to the RCS and clearly bounds the situation considered in this safety evaluation.

Operation with excess letdown allows the water in the demineralizers to cool down. When normal letdown is re-established, the cooler water from the demineralizers enters the RCS and may cause a reactivity excursion as described in the excessive cooldown accidents. The bounding analysis described in the UFSAR assumes a rupture of a steam line safety valve. The consequence of the event is a new steady state power level at about 110% power without violating the DNBR limit. No operator action and no automatic actions are required to mitigate the event. The changes to the procedure did not increase the severity of the cool down or otherwise change the event to require automatic or operator action. Operation with excess letdown allows the water in the demineralizers to cool down. When normal letdown is re-established, the cooler water from the demineralizers enters the RCS and may cause a reactivity excursion as described in the excessive cooldown accidents described in UFSAR Sections 14.1.10 or 14.1.11. The bounding analysis described in the UFSAR assumes a rupture of a steam line safety valve and clearly bounds the addition of slightly cooler charging water.

Document No: 02 OHP 4021.003.005 Rev. 9, Change 4

Title: Reactor Coolant System Degassing

*Description of Change:*

The subject procedure involved operation of the RCS sampling system to vent the non-condensable gases (mostly nitrogen) from the pressurizer steam space into the waste decay tanks. The change involved using the nuclear sampling system (NSS) as a vent system to purge the nitrogen gas.

*SE Summary:*

This change was reviewed and determined not to constitute an unreviewed safety question. Using the PZR steam space sampling line to provide venting in this fashion is similar to obtaining the grab samples using the same flow path and has already been evaluated in the UFSAR. During sampling, the system is used for a short time and during the venting process the system is used for a longer period of time. This activity did not increase the initiating frequency for any analyzed accidents. The change to the procedure did not affect the release paths, the frequency of release or the source term for the release of any accidents previously evaluated in the UFSAR. The procedure involves venting the non-condensable gases from the PZR to the waste decay tanks which is the normal evolution of the plant operations. This procedure does not degrade the performance of any safety system below its design basis. In both modes of operation, i.e., sampling system operation and vent system operation, the waste gases are discharged to gas decay tanks. The changes to procedures did not affect or introduce accident initiators of those types of accidents described in the UFSAR. This configuration has already been evaluated in the UFSAR for the purposes of obtaining both liquid and gas samples. This procedure utilized this alignment and function during normal shutdown operations. The proposed activity did not affect the margin of safety defined in the bases of the technical specifications.

Document No: 02 OHP 4021.007.002, REV. 4 & 02-TM-011098

Title: "Reactor Coolant Demineralizer Resin Sluicing and Replacement

**Description of Change:**

This change implements temporary modifications in procedure 02-OHP 4021.007.002, "Reactor Coolant Demineralizer Resin Sluicing and Replacement". The procedure sluices resin from and into the CVCS demineralizers. The physical changes entailed the temporary installation of a small diameter water hose from a valve connection on the demineralized water header to the Steam Generator Blowdown Demineralizer Sluicing Header Flushing Connection. Equipment installed under this temporary modification was removed in accordance with the procedure.

**SE Summary:**

This change was reviewed and determined not to constitute an unreviewed safety question. The installation of a temporary water hose to existing permanent connections designed for the intended purpose did not degrade the performance or compromise the pressure retaining function of the demineralized water header since the temporary water hose has a pressure rating greater than the design pressure of the demineralized water header. The proceduralized temporary modification had no impact on the accident mitigation function of any system, structure or component, did not degrade or prevent actions described or assumed in the UFSAR nor did it alter any assumptions in the radiological consequences of an accident described in the UFSAR. Upon completion of the temporary modification, the plant was returned to its original design basis conditions.





**Document No:** 02 OHP SP.164, Rev. 1

**Title:** Isolation and Restoration of the Containment 85 PSIG and/or 50 PSIG Control Air Headers

**Description of Change:**

This temporary modification supports taking the containment control air headers out of service. The temporary modification connected copper tubing from the piping connection downstream of valve 2-CA-685 to piping connections downstream of valves 2-CA-761 and 2-CA-762. The purpose of this connection was to provide an alternate air supply to Pressurizer PORVs 2-NRV-152 and 2-NRV-153, respectively. This activity also installed stem blocks to 2-VCR-11 and 2-VCR-21 (Ice Condenser Refrigeration Glycol Supply and Return Header Train B Containment Isolation Valves) where glycol chillers and pumps remained in service. This mechanically blocked open these valves to allow the flow of glycol into and return from containment. This was performed due to the increased personnel traffic into and out of the ice condenser. These activities were only required to be performed when the unit was in Mode 5

**SE Summary:**

This change was reviewed and determined not to constitute an unreviewed safety question. Temporarily connecting copper tubing from the containment control air header to the piping connections downstream of valves 2-CA-761 and 2-CA-762 allows containment control air to remain supplied to the PORVs, but did not impact the operation or functionality of these valves, as described in the UFSAR. This temporary modification was only needed while the plant is in Mode 5. Failure of the glycol system while the plant is in Mode 5 would not result in the initiation of an accident or in the need to isolate containment. The affected components are containment isolation valves, which are required to be operable while the unit is in Modes 1, 2, 3, and 4.

**Document No:** 12 OHP 4021.005.001, Rev. 17, Change 6

**Title:** Boron Makeup System Operation

**Description of Change:**

Procedure 12-OHP 4021.005.001, Revision 17, change 6, Boron Makeup System Operation was revised to provide steps to flush the blender line to the CVCS Hold-Up Tanks and isolate valves CS-386 and 390.

**SE Summary:**

This change has been reviewed and determined not to constitute an unreviewed safety question. This procedure is described in section 9.2 of the UFSAR. The applicable portion of the CVCS is shown on figure 9.2-1. Valves CS-389 and 390 are shown as normally open on this figure. The valve position was changed to normally closed to prevent inadvertent filling of the hold-up tanks or RWST. Other than this, the UFSAR section did not contain any specific language that would preclude this lineup or the flushing operation. The realignment of the valve positions from normally open to normally closed represents a change to the plant as described in the UFSAR.

Document No: 12 OHP 4021.010.005, REV. 9

Title: Operation Of Icemaking and Transport System

*Description of Change:*

Procedure 12-OHP 4021.010.005, Revision 9, "Operation of the Icemaking and Transport System" has been revised to reformat it to current standards, reword steps for clarity, re-tier steps for human factor considerations, incorporate standing change sheets, and add the ability to transfer ice to locations other than containment. This capability is particularly important to store ice to support the draining and re-filling of the ice condensers. These changes addressed transport of the ice while the plant is in Modes 5 and 6. (A separate safety evaluation has been issued to address the temporary modification developed to support this procedure.)

*SE Summary:*

This change was reviewed and determined not to constitute an unreviewed safety question. The procedure changes addressed transport of the ice in Modes 5 and 6, when a fuel handling accident and uncontrolled boron dilution are the only analyzed accidents to be evaluated. These changes did not affect the frequency or probability of occurrence of either of these accidents. This change did not affect the release paths, the frequency of release or the source term for release for any Mode 5 or 6 accidents previously evaluated in the UFSAR. This procedure applies while in Modes 5 and 6 when the ice condenser is not required to be operational per Technical Specification 3/4.6.5. No new failure modes for equipment important to safety are created by this procedure, nor were the frequency of any previously identified failure modes increased. No new credible release paths or accident initiators have been created by this procedure. The proposed procedure changes did not affect any Technical Specifications or their bases.



Document No: 12 OHP 4021.010.005, Rev. 9

Title: Operation of the Icemaking and Transport System

*Description of Change:*

Procedure 12-OHP-4021.010.005 was modified to accommodate making ice and transporting it to refrigerated trucks in addition to transporting it directly to the Ice Condensers. The stored ice was later transported to the Ice Condensers. This action was carried out with the plant in Modes 5 and 6.

*SE Summary:*

The Change to Procedure 12-OHP-4021.010.005 was reviewed and was determined not to constitute an unreviewed safety question. The original plans for the plant and the FSAR did not envision using the Ice Making System to make ice that would be stored until needed instead of making ice and delivering it directly into the Ice Condensers. The production of ice and transporting it to storage trucks and then later transporting the ice from the storage trucks while the units were in Mode 5 or 6 did not increase the probability of occurrence of an accident/malfunction of an accident previously evaluated in the FSAR, increase the consequences of an accident previously evaluated in the FSAR, or create the possibility of a new accident/malfunction of equipment important to safety.

Document No: 12 OHP SP.173

Title: CCW Surge Tank Leak Check

*Description of Change:*

Procedure No. 12-OHP-SP.173, was issued to allow the installation of a temporary hose connection to pressurize the Component Cooling Water (CCW) Surge Tanks # (1/2-TK-37) for performing leak tests in accordance with the ISI program.

*SE Summary:*

This change was reviewed and determined not to constitute an unreviewed safety question. The PTM enables performance of a leak test of the CCW Surge Tank and the pipe Class A-12 associated with the tank by pressurizing the system with plant air throttled to a pressure between 5 - 10 psig. The design pressure of the associated piping system is 150 psig and therefore, piping failure is not anticipated. This test simply enables detection of any leakage in the system. The hose was routed away from other safety systems and appropriately tied to structural members such that it did not become a personnel safety hazard. The small size air hose is also not a seismic issue because of its size and appropriate supporting system. The PTM is not an accident initiator, and did not increase or introduce any radiological hazards, adversely impact the safety related pipe or tank with which it interfaces, create any new radiological consequences or failure modes, or impact the basis for any Technical Specification. Therefore, this change was determined not to involve an unreviewed safety question.



*Document No:* 12 OHP SP.174

*Title:* Proceduralized TM - Revise 12-OHP-SP.174 to Remove Safety Valve  
1/2-SV-60 on CCW Surge Tanks (1/2-TK-37) for IST Set Pressure Test

*Description of Change:*

Proceduralized Temporary Modification 12-OHP-SP.174 was issued to allow the removal of safety valve 1/2-SV-60 located on the Component Cooling Water (CCW) Surge Tanks 1/2-TK-37 for performing set pressure test in accordance with the In-Service Testing (IST) program and to reinstall the safety valve after acceptable setting has been accomplished by the IST program.

*SE Summary:*

This change was reviewed and determined not to constitute an unreviewed safety question. The short duration operation of the CCW system with the safety valves 1/2-SV-60 removed and with FME cover on the safety valve nozzle was determined not to impact any accident previously evaluated in the UFSAR. It was determined that temporary removal of the safety valves was not an accident initiator and as such this change did not increase the probability of occurrence of an accident previously evaluated in the UFSAR.

Document No: 12 OHP SP.176, Revision 0

Title: Operation of the Ice Condenser Glycol System During Ice Condenser Melt Out

*Description of Change:*

Procedure 01-OHP SP.176, Revision 0, "Operation of the Ice Condenser Glycol System During Ice Condenser Melt Out" was developed and issued to operate the equipment installed to facilitate accelerated melting of all condenser ice in preparation for refilling each ice basket with fresh ice. This equipment was installed under design change 12-DCP-0888, "Unit 1 and 2 Ice Condenser Melt". This process is in place to correct deficiencies found in the condition of the ice in the ice condenser during inspections conducted in association with our recent AE inspection and to prevent any potential impact due to foreign materials in the ice discovered in inspections conducted by AEP. This procedure provided steps to maintain glycol level in the Ice Condenser Refrigeration System during Ice Condenser melt out, align the glycol headers to the temporary glycol heating system and operate the Unit 2 Ice Condenser refrigeration system for service during Unit 1 header modification and Ice Condenser melt out.

*SE Summary:*

This change was reviewed and determined not to constitute an unreviewed safety question. This procedure addressed the operation of portions of ice condenser refrigeration system in containment that do not interface with the RCS or the fuel handling system. This change did not affect the release paths, the frequency of release or the source term for release for any Mode 5 or 6 accidents previously evaluated in the UFSAR. The estimated radiological consequences to the environment of releasing all 350,000 gallons of ice melt to the environment would be 2.2 E-04 mrem which is much less than the radiological consequence limit for any analyzed accident. This procedure applies while in Modes 5 and 6 when the ice condenser is not required to be operational per Technical Specification 3/4.6.5. This procedure limits the ice condenser temperature to 120°F, thereby maintaining the qualification of equipment in containment. No new failure modes for equipment important to safety were created by this procedure, nor was the frequency of any previously identified failure mode increased. No new credible release paths or accident initiators were created by this procedure. The proposed procedure change did not affect any Technical Specifications or their bases.

Document No: 12 OHP SP.176, Revision 1

Title: Operation of the Ice Condenser Glycol System During Ice Condenser Melt Out

*Description of Change:*

Procedure 12-OHP SP.176, Revision 1, "Operation of the Ice Condenser Glycol System During Ice Condenser Melt Out" was developed to operate the equipment installed to facilitate accelerated melting of all condenser ice in preparation for refilling each ice basket with fresh ice for Unit 2. This equipment was installed under design change 12-DCP-0888, "Unit 1 and 2 Ice Condenser Melt". A separate safety evaluation issued to address this design change concluded that this modification is not a USQ. This process is occurring to correct deficiencies found in the condition of the ice in the ice condenser during inspections conducted in association with our recent AE inspection and to prevent impact due to foreign materials in the ice discovered in inspections conducted by AEP. This procedure provided steps to maintain glycol level in the Ice Condenser Refrigeration System during Ice Condenser melt out, align the glycol headers to the temporary glycol heating system and operate the Unit 1 Ice Condenser refrigeration system for service during Unit 2 header modification and Ice Condenser melt out.

*SE Summary:*

This change was reviewed and determined not to constitute an unreviewed safety question. The safety evaluation performed for 12-OHP SP.176, Revision 0, "Operation of the Ice Condenser Glycol System During Ice Condenser Melt Out" on May 21, 1998 applies to Revision 1 of this procedure, which also determined no unreviewed safety question existed for Rev 0. The change evaluated for Revision 0 has been evaluated by ENSA to be the same change effected by Revision 1, with the exception that Revision 1 provides the valve alignments and procedural steps for heating the ice in Unit 2 while maintaining glycol level in the Ice Condenser Refrigeration System and operating the Unit 1 Ice Condenser refrigeration system during the Unit 2 melt-out. The change evaluated in Revision 0 applied to the Unit 1 melt-out and ice condenser heating. As these changes have been evaluated to be the same from a design and licensing basis standpoint, the answers to the questions in the May 21, 1998 Safety Evaluation apply to this change as well.





*Document No:* OHP 4022.002.015, Revision 4 to Unit 1 and Unit 2

*Title:* Mode 4 LOCA

*Description of Change:*

The original issue of the Safety Evaluation for Revision 4 to Unit 1 and Unit 2 OHP 4022.002.015, Shutdown LOCA, implicitly assumed that at least one of the valves IMO-128 and ICM-129 would be operable under the conditions that would occur during a LOCA in Mode 4. However, both of these valves had been deleted from the Environmental Qualification (EQ) program. The purpose of this supplement is to require that valve IMO-128 is reinstated in the EQ program to assure its operability, as assumed in the original safety evaluation.

*SE Summary:*

The original issue of the Safety Evaluation for Revision 4 to Unit 1 and Unit 2 OHP 4022.002.015, Shutdown LOCA, concluded that no USQ existed for these changes based on the implicit assumption that at least one of the valves IMO-128 and ICM-129 would be operable. However, that safety evaluation failed to note that neither of these valves was currently in the EQ program. This supplement to that safety evaluation addressed this shortcoming by identifying the need for IMO-128 to be reinstated in the EQ program. The seven questions that must be answered to determine whether these procedure changes constitute a USQ were previously answered No in the original issue of the safety evaluation. These results were still applicable to this safety evaluation supplement and are not repeated here.

*Document No:* 12 CHP 5021.MCD.004, Revision 2, Change Sheet 4

*Title:* Removal and Replacement of Ice Condenser Baskets

*Description of Change:*

Changes to this procedure provided inspection and documentation for post repair or pre-installation of used ice condenser baskets and also included some minor administrative changes. CS 4 for Rev. 2 of 12 CHP 5021.MCD.004 provided acceptance criteria for damage to ice condenser components. The acceptance criteria was developed by Nuclear Engineering Structural Design (NESD) to ensure that the ice baskets returned to service will be capable of performing their intended safety functions as defined in the UFSAR.

*SE Summary:*

This change was reviewed and determined not to constitute an unreviewed safety question. This procedure change added acceptance criteria for inspections for used ice basket parts. The function of the ice baskets is to contain borated ice in 12-inch-diameter columns, 48 feet high, and to provide a means to absorb the thermal energy resulting from a LOCA or steam line break in the containment structure; the ice condenser baskets have no impact on the initiating event frequency for such events. Adherence to the acceptance criteria ensures that the ice condenser performs its intended safety function as defined in the UFSAR.

Document No: 12 THP 6020.ADM.015, REVISION 1

Title: Unit Startup Guide

*Description of Change:*

One sentence in one paragraph in FSAR Section 9.6.2.1 was changed to reflect actual gas sample collections in the plant. "Their respective sample vessel stations are located in a small, well ventilated cabinet within the sampling room to collect any gas which may be released during the sample collection" was changed to "the respective samples are purged to a well ventilated cabinet."

*SE Summary:*

This change was reviewed and determined not to constitute an unreviewed safety question. The proposed changes to the procedure are either editorial in nature, or relocate information, are related to the normal sampling system and are not related to UFSAR Chapter 14 accident initiation. The proposed editorial changes do not affect any release paths, or the probability, or magnitude of any releases from the plant for an accident.

Document No: 12 THP 6020.CHM.320, Rev. 0

Title: Intake Tunnel Molluscicide Treatment

*Description of Change:*

The procedure and associated proceduralized TM proposes to chemically treat the circulating water system intake tunnels for the control of zebra mussels through the use of biocide and to detoxify the biocide residual in the effluent prior to being discharged to Lake Michigan. Any future revisions of this procedure and its associated proceduralized TM shall require that this safety evaluation be reevaluated.

*SE Summary:*

This change was reviewed and determined not to constitute an unreviewed safety question. The safety evaluation was performed on the chemical treatment of the circulation water intake tunnels, circulating water system, ESW, and NESW for the eradication of zebra mussels. The only accidents in Mode 5 or 6 are Fuel Handling Accident and Inadvertent RCS Dilution. This procedure and proceduralized temp. mod. will not have any affect on those analyzed accidents. No increase in source term, release path, or release duration exists, so there was no increase in the consequences of an accident previously evaluated in the UFSAR. No new accident initiators or equipment failure modes were created. There was no change to the functionality of the safety related ESW equipment important to safety. Chemical eradication of the zebra mussel population with approved chemicals was allowed in accordance with the plant's NPDES permit.



Document No: 01 EHP 4030 STP.203

Title: Type B and C Leak Rate

*Description of Change:*

Procedure 1 EHP 4030 STP.203, Rev. 4 implemented the requirements of 10 CFR 50 Appendix J for the leak rate testing of containment isolation valves for Unit 1. Within this procedure are five proceduralized temporary modifications that were implemented. The temporary modifications were as follows:

- 1) Defeating of the interlocks for ICM-305, ICM-306, IMO-310 and IMO-320
- 2) Cross-tying of the containment control air headers
- 3) Installing blank flanges on the VCR valves
- 4) Installing inflatable pipe plugs in valves SI-190 and SI-208
- 5) Installing a blank flange at RO-53

*SE Summary:*

This change has been reviewed and determined not to constitute an unreviewed safety question. Implementation of this TM will not represent a hazard to the public health and safety. The change is being implemented as a temporary modification and the original plant condition will be restored after the completion of the work associated with the 5 proceduralized TMs. The proceduralized TM's are associated with the implementation of 10CFR50 Appendix J Option B leak rate testing for containment isolation valves. There is, as such, no increase in the probability of an accident and/or the consequences of an accident.

Document No: 01 EHP 4030.STP.203, R3C4

Title: Replace CLV Drain Isolation Valves & Revise Type B and C Leak Rate Test

*Description of Change:*

Component Evaluation No. CE-96-0012 replaced each, Containment Ventilation Units Drain Header to Rad. Waste Holdup Tanks Train 'A' ('B') Containment Isolation Globe Valve with a ball valve. Associated LLRT procedures were changed to test the valves in the same direction as the pressure existing when the valve is performing its containment isolation function.

*SE Summary:*

This change was reviewed and determined not to constitute an unreviewed safety question. There are no accidents that could be initiated by failure of these containment isolation valves. The section of pipe surrounding these valves is Seismic Class III, not safety-related and has no safety function. The replacement valves are capable of mitigating the consequences of a LOCA or SLB inside containment as demonstrated by the results of test procedures. The changes to the test procedures did not change the acceptance criteria for the tests. The component evaluation and the changes to the procedures did not affect the source term, release path or frequency of release for accidents. The replacement valves are designed to function as assumed in the accident analysis. None of the changes to the valves or changes to procedures including the proceduralized temporary installation of a blank flange, affects any of the margins of safety defined in the Technical Specifications bases.

Document No: 01 EHP 4030.STP.217A, Rev. 4

Title: Proceduralized TM for 1 EHP 4030 STP.217A, Rev. 4

*Description of Change:*

Safety Evaluation applicable to the proceduralized temporary modification sections within Procedure 1 EHP 4030 STP.217A, Rev. 4. The entire procedure was for Emergency Diesel Generator 1CD load sequencing and ESF testing.

*SE Summary:*

This change was reviewed and determined not to constitute an unreviewed safety question. The changes made under the proceduralized TM were not accident initiators. The only safety system assumed to function in the accident analyses that is applicable to this proceduralized TM was the Emergency Power System (EDGs). Even if the temporary equipment did cause a malfunction of the EDG, only one EDG would be affected. The other EDG would be available. The TM was only applicable in Modes 5 and 6 and single failure criteria did not apply. The changes within the proceduralized TM did not degrade below the design basis, the performance of the EDGs or increase challenges to the EDGs. Making the temporary connections to the EDG circuitry as delineated in the procedure and changing the power supply for VRS-1500's pump did not create any new accident involving the EDGs.



*Document No:* 01 EHP 4030.STP.217B, Rev. 4

*Title:* EDG 1AB Load Sequencing and ESF Testing

*Description of Change:*

This activity involves a proceduralized temporary modification to Procedure \*\*1 EHP 4030 STP.217B, "EDG 1AB Load Sequencing and ESF Testing," to support the required load sequencing and ESF testing for Emergency Diesel Generator (EDG) 1AB. The following changes were evaluated under this activity: (1) A wattmeter was to be connected to secondary circuits used for monitoring the EDG's output parameters, such as power, current, voltage, and frequency. An analog recorder and other equipment was to be connected to the temporary wattmeter; (2) Connections were to be made from the temporary analog recorder to auxiliary outputs of the Dynalco speed transmitter, located in the diesel generator sub-panel; (3) Connections were to be made from the diesel starting relay coil to the analog recorder and an event recorder via an auxiliary relay; and (4) The coil of relay K609 was to be monitored by connecting the relay to the temporary event recorder. This work was to be performed while the unit is in Modes 5 or 6 and the panels were energized.

*SE Summary:*

This change has been reviewed and determined not to constitute an unreviewed safety question. The TM did not affect the availability of offsite power and it did not interfere with the operation of the EDGs to mitigate the consequences of an accident (temporary equipment will not prevent it from auto starting and performing automatic safety function). Because the proceduralized TM was only to connect test equipment to the associated EDG circuitry and to connect the equipment following standard installation practices, it cannot interact with other equipment that mitigate the consequences of an accident. The proceduralized TM did not increase the radiological source term; did not increase the magnitude or frequency of releases, and did not affect the release paths for any accidents.



Document No: 12 EHP 4030 ATR.223.001

Title: Proceduralized Temporary Modification - Fire Pump Performance and Starting Sequence Tests

*Description of Change:*

The Proceduralized Temporary Modification (PTM) performs the Fire Pump Performance and Starting Sequence Tests, hereinafter referred to as FP tests, in accordance with Procedure No. \*\*12 EHP 4030 ATR.223.001. These tests are performed at least once per 18 months on the Fire Protection (FP) Water System and temporarily install calibrated pressure gauges in the suction and discharge side of each pump and a Differential Pressure (DP) cell at flow indicator ZFI-401.

*SE Summary:*

The change was reviewed and determined not to constitute an unreviewed safety question. The PTM installs instruments on the non-safety related and non-seismic FP piping system in the FP pump house. Although the fire pumps are isolated from the discharge ring header one at a time, FP system (water) operability is maintained during the temporary installation of these instruments and the FP test process. There is no accident initiator in this PTM and the fire suppression capability remains unaffected. The test instruments are not accident initiators and do not adversely affect any equipment whose malfunction is postulated in the UFSAR to initiate an accident or prevent an accident from occurring. Also, this PTM does not cause any safety related system or component from mitigating the consequences of an accident described in the UFSAR. The change is associated with the non-safety related and non-seismic FP system which has no interface with any safety related system. The safe performance of the FP system is not compromised. The changes are made in the FP pump house away from any safety related SSC.



Document No: 12 EHP 4030.STP.211, Rev. 2 CS-6.

Title: Ice Condenser Surveillance

*Description of Change:*

Procedure 12-EHP-4030.STP.211, Rev. 2 CS-6, "Ice Condenser Surveillance," contained proceduralized temporary modifications for installing temporary connections, valves and fittings for supply air to the ice condenser through CPN-80 and ice to the ice condenser through CPN-57. This proceduralized temporary modification was previously reviewed in a safety evaluation and found not to be an unreviewed safety question or to require any updates to the UFSAR or other licensing basis documents. At that time, the entire temporary modification was classified as safety-related due to its interface with other safety-related systems, structures or components. This Safety Evaluation addressed the issue of safety classification of the components used to provide containment closure during Modes 5 and 6 in these temporary modifications.

*SE Summary:*

This change was reviewed and determined not to constitute an unreviewed safety question. The components evaluated were not considered accident initiators. Furthermore, this activity did not affect the release paths, the frequency of release or the source term for release for any previously evaluated accidents. The "Fuel Handling Accident" analysis of record assumed no containment isolation; therefore, these components cannot impact the consequences of the accident beyond those already evaluated. The leak-tightness of the temporary connection ensures that the containment would not be degraded below its design basis, so challenges to the containment were not increased by this activity. The temporary connections did not affect the failure modes of any component important to safety, or add any new failure modes. This activity did not introduce or affect any plant failure modes or accident initiators or affect radiological consequences in any way. This method for containment closure was found to be acceptable, as the devices ensure the containment was leak-tight against 4 psig; therefore the existing bases for the Technical Specifications were satisfied.

Document No: 12 EHP 4030.STP.219

Title: Thermal Power Measurement and Reactor Coolant System Flowrate  
Proceduralized Temporary Modification 12-TM-082097 Revised Safety  
Review

*Description of Change:*

This revised and replaced the original safety review dated December 18, 1997, performed for Proceduralized Temporary Modification 12-TM-082097. The Temporary Modification supported surveillance procedure 12 EHP 4030 STP.219, "Thermal Power Measurement and Reactor Coolant System Flowrate." Reactor thermal power and Reactor Coolant System flow rate are parameters basic to the thermal-hydraulic design of the plant, including the reactor, protection and ancillary support systems. As such their values are basic inputs to a myriad of safety analyses instrument performance requirements and settings. The periodic measurement of these parameters is required by Technical Specifications to ensure that safety analysis input assumptions and plant operating parameters are appropriately bounded.

*SE Summary:*

This change was reviewed and determined not to constitute an unreviewed safety question. Thus, this change to the UFSAR will not have an impact on any of the accident initiators for any of the accidents analyzed in the UFSAR. Also, this change does not involve physical modification to any equipment important to safety, and no new failure modes will be created.

Document No: 12 EHP 6040 PER.089, Rev. 0

Title: Containment Hydrogen Skimmer Flow Balance Test

*Description of Change:*

Procedure 12 EHP 6040 PER.089, "Containment Hydrogen Skimmer Flow Balance Test," verifies proper airflow distribution from areas serviced by the Containment Hydrogen Skimmer (CEQ) fans. The CEQ fans are important to safety because they are required to operate to maintain hydrogen concentrations in containment below the flammability limit. The Safety Evaluation Screening concludes that performance of procedure 12 EHP 6040 PER.089 represents a change to the plant as described in the UFSAR and a test or experiment not described in the UFSAR, therefore requiring a safety evaluation.

*SE Summary:*

The change was reviewed and determined not to constitute an unreviewed safety question. The performance of this procedure does not increase the radiological source term, is not an accident initiator of itself and does not impact the results of any previously analyzed accident. Per Technical Specification 3.6.1.4, 3.6.4.2 and 3.6.5.1.b, the CEQ Fans and associated flow paths are required to be operational during Modes 1, 2, 3 and 4. The performance of this procedure is in Modes 5 and 6. Additionally, the equipment/components involved in the performance of this procedure do not perform a function that might initiate an accident. No UFSAR or Technical Specification changes are required because of the implementation of this procedure.



Document No: 12 EHP 6040 PER.380, Rev. 0

Title: Reliability Check of the Source Range and Gamma-Metric Channels

*Description of Change:*

The requirement for 2 counts per second (CPS) on the source range monitors is being qualified to only apply to the "approach to criticality," and the option to use the scaler timer if the count rate decreases below 2 CPS is being added.

*SE Summary:*

This change was reviewed and determined not to constitute an unreviewed safety question. 12 EHP 6040 PER.380 verifies accuracy of the scaler timer below 2 CPS. However, when the count rate is below 2 CPS, the risk of an undetected boron dilution accident is increased. This is addressed by increased surveillance or closure of the boron dilution source valves in procedure 1,2 OHP 4030.STP.030, "Daily and Shift Surveillance Checks." The implementation of the recommendations decrease the probability of inadvertent boron dilution and, therefore, does not constitute an unreviewed safety question.

Document No: 12 EHP SP.095, REV. 0

Title: Ice Condenser Visual Data Analysis

*Description of Change:*

Procedure 12 EHP SP.095 analyzes data collected by visual examination of the ice baskets and ice condenser walls. The analysis assesses any damage to the baskets and walls. The system affected by the procedure is the ice condenser. The components affected by the procedure are the ice baskets and ice condenser walls, excluding the bay separation walls.

*SE Summary:*

The change was reviewed and determined not to constitute an unreviewed safety question. The initial issue of procedure 12 EHP SP.095 does not increase the probability of occurrence of an accident. The procedure concerns analysis of data collected on the ice condenser baskets and walls. The ice condenser is an engineered safety feature designed to control containment pressure and is involved in removal of fission products following a LOCA. The ice baskets and ice condenser walls do not initiate a LOCA or any other accidents previously evaluated in the UFSAR. The critical parameters are the mass of ice in containment and the concentration of sodium tetraborate. The initial issue of procedure 12 EHP SP.095 does not change the mass of ice or its concentration of sodium tetraborate. The hydraulic diameter and heat transfer area are maintained within the limits established by test to be consistent with the containment design pressure. The acceptance criteria are based on maintaining sufficient basket strength to prevent structural damage or deformation resulting from an accident or DBE. The ice baskets meeting these acceptance criteria maintain the ice in the required array for adequate ice condenser performance. The procedure may impact the consequences of malfunctions that rely on the containment and ice condenser to mitigate the consequences. Those malfunctions are pipe ruptures or component failures that lead to release of the RCS or main steam inside of containment. These releases are bounded by the LOCA accident consequences. The analysis removes conservatism in the original analysis by performing a more detailed stress analysis. Since the allowable limit has not changed, and the failure point remains greater than the allowable limit, the margin of safety has not been reduced.

**Document No:** 12 EHP SP.095, Rev. 0, Change Sheet 1

**Title:** Ice Condenser Visual Data Analysis

**Description of Change:**

12 EHP SP.095 has been issued for the analysis of data collected by visual examination of the ice baskets and ice condenser walls. The analysis assesses any damage to the baskets and walls. Change sheet 1 implements the following changes to the procedure: revises the list of references, adds the option for one tack weld in place of one screw on the stiffener rings, adds criteria for extra screw hole spacing, rewords staggered seam criteria. The system affected by the changes to the procedure is the ice condenser. The components affected by the proposed changes to the procedure are the ice baskets.

**SE Summary:**

This change was reviewed and determined not to constitute an unreviewed safety question. The procedure concerns analysis of data collected on the ice condenser baskets and walls, including revised acceptance criteria allowing 1) the option for one tack weld in place of one screw on the stiffener rings, 2) extra screw hole spacing, and 3) rewording staggered seam criteria. The changes to procedure 12 EHP SP.095 did not change the mass of ice or its concentration of sodium tetraborate. The hydraulic diameter and heat transfer area would be maintained within the limits established by test to be consistent with the containment design pressure. The acceptance criteria are based on maintaining sufficient basket strength to prevent structural damage or deformation resulting from various combinations of design, OBE, DBE, and DBA loads. The ice baskets that meet these acceptance criteria maintain the ice in the required array for adequate ice condenser performance. The proposed changes to the procedure do not impact the loads or load factors used in the analysis, therefore the acceptance limit does not change.

**Document No:** 12 MHP 4030.STP.054, Rev. 0

**Title:** Residual Heat Removal Train Operability Test - Shutdown

**Description of Change:**

12MHP 4030.STP.054 was created as a Maintenance Department procedure. This procedure supersedes an existing Engineering Department procedure.

**SE Summary:**

This change was reviewed and determined not to constitute an unreviewed safety question. The Safety Evaluation concluded that the changes were administrative in nature because they involved creation of a Maintenance Department procedure to supersede an existing Engineering Department procedure. Further, the creation of the Maintenance Department version of the procedure did not involve any significant change to the procedure activities or worker qualifications. Finally, although a minor activity was added to the procedure, this activity was added specifically to address a shortcoming identified in the existing Engineering Department procedure and made the new procedure conform to the UFSAR description.



Document No: 12 MHP 5040.010.001 Rev. 0

Title: Ice Condenser Support Activities

*Description of Change:*

The temporary modification documents the containment configuration for Temporary Air Supply and Temporary Ice Transport, and installs temporary power to provide additional power receptacles for ice condenser maintenance work. These temporary modifications were formerly controlled by procedure 12-EHP-4030.STP.211, but it was determined that a new group and a new procedure should be used.

*SE Summary:*

This change was reviewed and determined not to constitute an unreviewed safety question. This modification is performed only during outages to fill and work on the ice condensers. This procedure does not impact the main power generating systems (feedwater heater drains, etc.), nor would the failure of any operating steps or of any equipment used in the procedure impact the capability of any safety-related items in the plant. The pressures and flow quantities of the fluids involved were well within previously evaluated figures. It did not create any new type of failure mode and additionally did not interface in any new way with equipment important to safety. This modification was a reconfiguration of the containment penetrations for the purpose of performing work on the ice condenser for filling it with ice.

The temporary power and associated equipment added under the proceduralized TM are not accident initiators. The equipment cannot adversely affect any equipment whose malfunction is postulated in Chapter 14 of the UFSAR to initiate an accident or prevent an accident from occurring. The equipment is seismically restrained to prevent it from adversely interacting with any other equipment. Also, because the equipment is shunt-tripped for protection in the event a start signal for the diesels was received, it cannot adversely affect the operation of the emergency diesel generators. The temporary modification does not change, degrade, or prevent any operable safety-related systems or component from mitigating the consequences of an accident as described in the UFSAR. There is no affect on the assumptions made in the UFSAR radiological consequences evaluations of an accident. The installation of the temporary power as delineated in the procedure cannot create any credible accident that has not been evaluated in Chapter 14. The temporary power equipment installed as described in the procedure cannot create the possibility of a malfunction of any equipment important to safety that has not already been evaluated in Chapter 14. The proceduralized temporary modification does not affect any technical specifications or any bases.



*Document No:* 12 MHP 5040.010.002

*Title:* Ice Melt Vacuum System

*Description of Change:*

A proceduralized TM was utilized as an integral portion of new procedure 12-MHP 5040.010.002, which provided instructions and documentation for installation, start-up operation, shutdown and restoration of the Ice Melt Vacuum System, previously provided under another procedure. The intent of the TM was to gravity drain, via a 3/4" rubber hose, the content of the non-safety-related temporary ice melt tanks located at the Auxiliary Building elevation 650', to the CVCS Monitor Tanks Nos. 3 and 4 in the Auxiliary Building Elevation 609'. The TM was also utilized to install and operate a portable electric heater on the Ice Condenser intermediate deck-doors, to defrost the wall duct panels, where ice formation was detected. This safety evaluation enveloped the proceduralized TM, and the associated systems/equipment described in procedure 12-MHP 5040.010.002. The new procedure 12-MHP 5040.010.002 replaced those portions of the previously approved Engineering Procedure 12EHP 4030 STP.211 (Ice Condenser Surveillance) that dealt with operation of the Ice Melt Vacuum System during Modes 5 and 6. It was recognized that this procedure did not allow the ice melt vacuuming operation and, consequently, operation of the proceduralized TM can not be performed during Mode 6 when fuel movement or core alterations are taking place.

*SE Summary:*

This change has been reviewed and determined not to represent an unreviewed safety question. There were minor temporary changes to the plant configuration and procedures, all of which have been evaluated with the conclusion that they had no adverse impact on the plant operation of public safety. All the plant's permanent systems and components will return to their original configuration, without being degraded.

Document No: UCR 98-0099

Title: Transferring Operation to the New Fire Suppression Water System

*Description of Change:*

UFSAR Section 2.6 was revised to indicate that the Lake Township Fire Hydrant system is the backup water source for Fire Protection. This change is applicable to Unit 1 and Unit 2.

*SE Summary:*

The change was reviewed and determined not to constitute an unreviewed safety question. The fire suppression system is maintained within the requirements of T/S 3.7.9.1 (a) & (b). The backup water supply was previously analyzed where the actual source change occurred. This revision merely corrects the UFSAR to accurately describe this system configuration.

Document No: UCR 98-0123

Title: Operation of Centrifugal Charging Pump Minimum Flow Valve

*Description of Change:*

This change revised the UFSAR to reflect Centrifugal Charging Pump (CCP) miniflow valve setpoint changes made to ensure CCP flow for the weakest CCP pump would be maintained as required against high RCS pressure conditions.

*SE Summary:*

This UFSAR Change was reviewed and determined not to constitute an unreviewed safety question. Since the minimum flow control valves will continue to open prior to the reactor coolant system reaching the limiting pressure for CCP operation, the change will not affect the performance of the CCPs. The reliability of the CCPs will not be impacted, and no new failure modes or accident initiators are introduced as a result of this change.

*Document No:* UCR 98-0132

*Title:* Change to UFSAR Section 6.2 - Boron Injection Tank Concentration

*Description of Change:*

The boron concentration in the boron injection tank (BIT) has been changed to equal to that found in the refueling water storage tank (RWST) which is approximately 2400 to 2600 ppm boron.

*SE Summary:*

This change was reviewed and determined not to constitute an unreviewed safety question. In the accident analyses, for those events where the BIT boron concentration was modeled, it was conservatively assumed to be equal to 0 ppm. It was also determined that this change to the UFSAR would not have an impact on any of the accident initiators for any of the accidents analyzed in the UFSAR. Also, this change did not involve physical modification to any equipment important to safety, and no new failure modes will be created.

*Document No:* UCR 98-0139

*Title:* Revision to UFSAR Table 7.8-4

*Description of Change:*

Table 7.8-4 of the UFSAR has been modified to indicate that the RHR Heat Exchanger Outlet Temperature is displayed within the control room on the plant computer.

*SE Summary:*

The above change was reviewed and determined not to constitute an unreviewed safety question. RG 1.97 instrumentation is used for post accident monitoring. Thus, this change to the UFSAR will not have an impact on any of the accident initiators for any of the accidents analyzed in the UFSAR. The change does not physically modify any equipment important to safety. In addition, the change to the UFSAR does not impact the operators ability to identify the operation of individual safety systems and other systems important to safety during and following to an accident.

*Document No:* UCR 98-0177

*Title:* Revision to UFSAR Table 9.5-3

*Description of Change:*

The maximum allowable shell side component cooling water (CCW) flow rate through the CCW heat exchanger of 4.5x106 lb/hr was added to Table 9.5-3 of the UFSAR.

*SE Summary:*

This change was reviewed and determined not to constitute an unreviewed safety question. There is no physical change to the CCW system associated with the UFSAR change. Thus, this change will not impact the capability of the CCW heat exchangers to perform their intended functions. Furthermore, the increase in the maximum shell side flow rate will not create any new failure modes for any safety-related equipment.

*Document No:* UCR 98-0178

*Title:* Cold Overpressure Block Switches

*Description of Change:*

The change deleted "key-locked" from the second paragraph, first sentence, in UFSAR Section 7.2.3 page 7.2- 48. Section 7.2.3 is the reactor protection system evaluation. In addition, the second sentence was deleted, and following sentences were added: "These controls for Cold Overpressure Block switches have removable handles that are administratively controlled. These handles are only installed to manipulate the Cold Overpressure Block switches."

*SE Summary:*

This change was reviewed and determined not to constitute an unreviewed safety question. The change removed the statement "key-locked" and revises the UFSAR description of the interlock on the switch for the pressurizer PORV to be consistent with the existing administrative controls. The change does not increase the probability or consequence of an accident, does not increase the probability or consequence of a malfunction, and does not reduce the margin of safety. No change to the Technical Specifications was required.



**Document No:** UCR 98-0187

**Title:** Change to UFSAR Table 9.2-3 to Reflect the Shell-Side Flow for the Letdown Heat Exchanger for Maximum Purification Model

**Description of Change:**

This change corrects the shell-side flow for the Letdown Heat Exchanger for Maximum Purification Mode identified in UFSAR Table 9.2-3 to 510,926 lb/hr. This change applies to Units 1 and 2.

**SE Summary:**

This change was reviewed and determined not to constitute an unreviewed safety question. The review determined that the letdown heat exchanger flow rate was not assumed in the safety analyses, the letdown function was not required following any accident, the heat exchanger was isolated during safety injection, and the proposed UFSAR flow value was bounded by that identified in the heat exchanger performance data.

**Document No:** UCR 98-0212

**Title:** Revise UFSAR Table 9.5-1 to Reflect the CCW Heat Exchanger Installation Code

**Description of Change:**

UFSAR Table 9.5-1 identifies the code requirement for the CCW heat exchangers as ASME B&PV Code, Section VIII, 1968 edition. This code is only applicable to the design and fabrication of the heat exchangers. The correct code for installation is USAS B31.1, 1967 edition. This change revised UFSAR Table 9.5-1 to reflect the installation code. This change applies to Units 1 and 2.

**SE Summary:**

This change was reviewed and determined not to constitute an unreviewed safety question. This review determined that the change did not affect the heat exchanger pressure boundary, the change was consistent with original heat exchanger installation, no system conditions existed that would have resulted in overpressurization of the CCW heat exchangers, and the reliability and operability of the CCW loops or any other system were not affected. Revision 1 to the safety evaluation was approved on 10/15/97. This revision was initiated to provide the correct heat exchanger code references in the answer to question number 2 of the original safety evaluation. The evaluation concluded that the conclusions of the original safety evaluation were still valid.



*Document No:* UCR 98-0285

*Title:* UFSAR 9.8.3.2, ESW

*Description of Change:*

The description for the Essential Service Water (ESW) alignment in section 9.8.3 of the UFSAR was changed to allow alignment to the Emergency Diesel Generators for ESW flow balancing in 12-OHP 4021.019.001, Rev. 16, Operation of the Essential Service Water System. This establishes a bypass flow of ESW under certain conditions to maintain the 2,000 gpm minimum required ESW pump flow rate.

*SE Summary:*

This change was reviewed and determined not to constitute an unreviewed safety question. The change allows ESW to the EDGs to be aligned manually to the designed post-accident safety position (i.e., valves open supplying cooling water flow) during certain normal plant operations. The designed plant configurations and the minimum flow requirements for the ESW will not be affected by this change. Establishing ESW flow to the EDGs air aftercooler, lube oil cooler and jacket water cooler during normal operation will not affect the ability of these components to perform their design safety functions. The components were designed to accommodate the flows proposed, and placing them in their safety function positions will actually reduce the possibility of failure.

*Document No:* UCR 98-0289

*Title:* Revise UFSAR Chapter 2.6 to reflect new heat rejection rate to Lake Michigan

*Description of Change:*

The UFSAR was revised to reflect the total Heat Rejection Rate as allowed by the Michigan Department of Natural Resources in 1995.

*SE Summary:*

This change was reviewed and determined not to constitute an unreviewed safety question. The change made the UFSAR consistent with the current National Pollution Discharge Elimination System Permit (NPDES). The heat rejection rate values for each unit and plant total were replaced by the current limit for the total heat rejection rate of  $16.8 \times 10^9$  BTU/hr. It was also necessary to emphasize the correlation between heat rejection and plant efficiency. The changes in the UFSAR could result in an insignificant increase in the inlet water temperature for the ESW system. The plant procedures, however, address the ESW inlet temperature limits. This change in the allowable heat rejection rate will not impact plant system or components.

*Document No:* UCR 98-0321

*Title:* ECCS Pump Low Pressure Alarms

*Description of Change:*

UFSAR Section 7.5.2 "System Design" on page 7.5-13 was revised to delete a reference to ECCS pump low discharge pressure alarms that are not installed in the plant. The reference appears in the system description for the I&C Systems. This section lists many of the parameters that are monitored by plant operators to verify the proper operation of equipment important to safety.

*SE Summary:*

This change was reviewed and determined not to constitute an unreviewed safety question. The change involves deleting the words "as well as local indication" from the UFSAR description for the RWST level instrumentation on page 7.5-13. The instrumentation was never installed in the plant and the change is considered to be a minor correction. The change does not require a change to technical specifications.

*Document No:* UCR 98-0397

*Title:* Revision to UFSAR Section 7

*Description of Change:*

UFSAR Section 7.5.2, which describes the operation of the Engineered Safety Features Actuation Instrumentation, was changed to remove the reference to local indication for the Refueling Water Storage Tank Level. This indication does not exist.

*SE Summary:*

The change was reviewed and determined not to constitute an unreviewed safety question. This change to the UFSAR will not have an impact on any of the accident initiators for any of the accidents analyzed in the UFSAR. Also, this change does not involve physical modification to any equipment important to safety, and new failure modes will be created.



**Document No:** UCR 98-0405

**Title:** Pressurizer Relief Tank (PRT)

**Description of Change:**

UFSAR Section 4.2.2.3, Pressurizer Relief Tank, page 4.2-9, third paragraph, third sentence was revised to state, "The volume of water in the tank is capable of absorbing the heat from the assumed discharge, with an initial temperature of 120 F and increasing to a final temperature of 210 F (from 200 F)".

**SE Summary:**

This change was reviewed and determined not to constitute an unreviewed safety question. Re-rating analysis (WCAP 12135) identified the potential for a minor (5%) increase in PRT final temperature from 200 F to 210 F following a design basis relief valve discharge. The licensing basis was merely revised to reflect the design basis. No changes to the Technical Specifications or plant procedures are required due to the UFSAR revision.

**Document No:** UCR 98-0476, 0477, 0485, 0481, 0653

**Title:** UFSAR Changes for Sections 9.8.2.3, "Compressed Air System"

**Description of Change:**

These changes revise Compressed Air System portions of the UFSAR. The current preoperational testing requirements specified in UFSAR Section 9.8.2.4 (Tests and Inspections) for the Compressed Air System has been replaced with current Compressed Air System testing requirements. An additional sentence was added to the third paragraph of UFSAR Section 9.8.2.3 to clarify that a manual action is required to load the backup Plant Air Compressor following its automatic start. UFSAR Table 9.8-2 was updated to reflect changes made to Plant Air Compressor parameters by RFC 12-2035, which replaced the compressor 3rd stage impeller. Specifically, the change involved the discharge pressure, discharge temperature, and capacity for the compressor.

**SE Summary:**

These changes were reviewed and determined not to constitute an unreviewed safety question. The revised testing specified for this section documents methods used to ensure that a clean and reliable supply of control air is maintained to the safety related components. This change did not affect the failure modes, did not increase the frequency of a loss of plant air, and did not reduce the air quality of the Compressed Air System. The changes made to UFSAR Table 9.8-2 did not change design or operating parameters of equipment downstream of the Plant Air receivers or any part of the Control Air System, did not affect the system's ability to clean and dry control air, and did not affect the function of supplied Containment Isolation Valves. The change did not affect Technical Specification or bases.

Document No: UCR 98-0724

Title: Testing of Accumulator Discharge Check Valves

*Description of Change:*

UFSAR Section 6.2.3 (page 6.2-35) was revised to delete the following paragraph:

"When the Reactor Coolant System is being pressurized during the normal plant heatup operation, the check valves are tested for leakage as soon as there is about 100 psi differential across the valve. This test confirms the seating of the disc and provides a quantitative leakage rate measurement, which can be compared with the results of earlier tests. When this test is completed, the discharge line test valves are opened and the Reactor Coolant System pressure increase continued. There should be no increase in leakage from this point on since increasing reactor coolant pressure increases the seating force and decreases the probability of leakage."

The following text replaces the deleted paragraph:

"The check valves are leak tested on a refueling outage frequency with at least 150 psi differential across the valve. The test confirms the seating of the disc and provides a quantitative leakage rate measurement that can be compared with the results of earlier tests."

*SE Summary:*

This change was reviewed and determined not to constitute an unreviewed safety question. This is a change to the UFSAR Section 6.2.3, page 6.2-35 that makes the testing procedure for the accumulator discharge check valves consistent with the specifications of ASME Section XI, Technical Specification 3/4.4.6.2, SER - Pump and Valve Inservice Testing Program for the Remainder of the First Ten Year Interval (N85145, 09/05/85), and approved plant procedures. Specifically, the change makes the test pressure 150 psid and sets a surveillance interval for the performance of the test based on refueling outage frequency.

*Document No:* UCR 98-0739

*Title:* Revision to UFSAR Figure 7.2

*Description of Change:*

UFSAR Figure 7.2-2, "Reactor Protection Systems" was revised to add the parameter "RCP Bus Under-Frequency" to the block diagram, the text "RCP Bus" to the existing under-voltage parameter, and a general notation: "Typical for a Single Train" to the block diagram.

Also, Table 7.2-1, Item 9A was revised to add comment information 2/4 undervoltage signals will trip all reactor coolant pumps and directly actuate reactor trip: interlock with P-7.

*SE Summary:*

This change was reviewed and determined not to constitute an unreviewed safety question. The change did not involve any change of equipment, sequence of testing, sequence of operations or changes to plant configuration. The change involves correcting UFSAR Figure 7.2-2 and Table 7.2-1 to agree with existing validated plant configuration. This change incorporates the intent of the response to item 7.30 of the NRC request for additional information, N72050 dated August 11, 1972. There are no changes to the Technical Specifications required for implementation of this UFSAR change.

*Document No:* UCR 98-0748

*Title:* Addition of Station Blackout (SBO) Section to the UFSAR

*Description of Change:*

This change added a new section to the UFSAR covering the topic of Station Blackout (SBO). This change was initiated in response to an NRC question on how 50.59 evaluations were addressing the potential impact that proposed changes may have on the licensing basis for Station Blackout (SBO). Although the licensing basis for the SBO rule (10 CFR 50.63) is well documented within licensing submittal packets, the lack of explicit details regarding the SBO analyses within the UFSAR was thought to be a weakness. As such, the commitment was made to add a new section to the UFSAR describing the SBO licensing basis analyses.

*SE Summary:*

The change has been reviewed and determined not to constitute an unreviewed safety question. This change added a new section to the UFSAR to describe the station blackout analysis. The SBO analysis is based on existing licensing documents. The change does not create an unreviewed safety question because no physical changes to the plant are being made; no changes to the plant operating procedures are being made; no new tests or experiments are being proposed; and no changes to previously made NRC commitments are being proposed.



**Document No:** UCR 98-0808

**Title:** Back Feeding from the 765 kV Grid through the Unit 2 Generator Step Up Transformer

**Description of Change:**

UFSAR, Page 8.3-1 was revised to describe the backfeed operation as outlined in procedure 02-OHP 4021.082.001, "4KV Buses Power Source Transfer and De-Energizing and Re-Energizing a Safeguards Bus".

**SE Summary:**

This change was reviewed and determined not to constitute an unreviewed safety question. This change does not affect the initiators or precursors of any accident previously evaluated. The back feed configuration, once established, will not adversely impact the operation of the auxiliary power system nor adversely impact any associated safety-related equipment in a different manner than it would while aligned for normal operation with the GSU transformer connected to offsite power. The back feed configuration does not create the possibility of an accident of a different type than those already evaluated in the SAR. The back feed configuration will not reduce the margin of safety as defined in the basis for any Technical Specification.

**Document No:** Commitments 404 and 405

**Title:** Deletion of Commitments 404 and 405

**Description of Change:**

This change deleted an unnecessary requirement to hold waste gases for 45 days prior to release as delineated in commitments 404 and 405. The intent of the hold up time is to ensure the amount of radiation released to the environment is minimized and the amount released is maintained below Technical Specification limits. The current requirements for waste gas releases requires each gas decay tank be sampled, analyzed, and evaluated against 10 CFR 50 Appendix I limits and Technical Specification 3.11.2.2 release limits. The 45-day hold up time is not necessary to meet these requirements and is in some cases contrary to minimizing radiation releases and maintaining gaseous chemistry.

**SE Summary:**

This change was reviewed and determined not to constitute an unreviewed safety question. Changing the planned release requirements of the gas decay tanks cannot affect the accident initiators. The tanks are passive devices intended to hold up radioactive gases for eventual release once the gases have decayed to a point that the quantity of radiation released will remain below 10 CFR 50 Appendix I requirements and TS 3.11.2.2 release limits. The rupture of a gas decay tank has been fully analyzed as discussed in UFSAR Section 14.2.3, Accident Waste Gas Release. This change is bounded by this analysis.



Document No: ECP NO. 12-NI-24, Rev. 1

Title: Low Temperature Overpressure Protection (LTOP) Administrative Controls

*Description of Change:*

This change revised the LTOP administrative controls established in ECP No.: 12-NI-24, Revision 1. The subject changes were the result of a revised analysis for the Unit 1 Steam Generator Tube Plugging Program. The increase in steam generator tube plugging has resulted in changes to the administratively controlled (i.e., non-technical specification) temperature limits for starting the reactor coolant pumps (RCPs). The previous limit for running RCPs was 110°F. Because of the increase in steam generator tube plugging, the minimum RCS temperature at which more than one RCP can be run with the RHR pump suction safety valve (SV-103) operable, was increased from 121°F to 125°F.

*SE Summary:*

The change was reviewed and determined not to constitute an unreviewed safety question. This change identifies more conservative RCS temperature limits for starting the reactor coolant pumps. Operating within these administrative controls ensures that overpressure protection exists over the entire 10CFR50 Appendix G heatup/cooldown range of operation, including both water solid conditions and after a pressurizer bubble has been established. The LTOP systems are not used to protect the plant during or following any UFSAR chapter 14 events. The new RCS temperature limits for starting the RCPs ensure compliance with 10CFR50 Appendix G. The proposed changes will not result in an increased probability of the reactor vessel brittle fracture. No accident of a different type than previously evaluated was identified. No malfunction of equipment important to safety of a different type than any previously evaluated in the UFSAR was identified. The new limits for RCP operation maintain more restrictive requirements than found in the Technical Specifications.

Document No: ENTDM 97-067

Title: Reactor Cavity Bulkhead Seal Duct Tape as Construction Aid

*Description of Change:*

Evaluation for Engineering Technical Direction Memo (ENTDM) 97-067 verified that the current practice of using duct tape as a construction aid for the installation of the seals on the vertical lower containment barriers does not create an unreviewed safety question. A Safety Evaluation Screening had suggested that the use of duct tape might represent a change to the plant because the duct tape added material to the barrier seals and that the duct tape might create a challenge to the operability of the containment sump as described in the Technical Specifications. Evaluation ENTDM 97-067 alleviated the concerns raised by the Safety Evaluation Screening.

*SE Summary:*

This evaluation was reviewed and determined not to constitute an unreviewed safety question. ENTDM 97-067 evaluated the uses of duct tape on the lower containment barriers and examined the properties of duct tape relative to other materials in containment. The Safety Evaluation concluded that the practice of using duct tape as a construction aid for the installation of the seals on the vertical lower containment barriers did not increase the probability or consequences of an accident or malfunction and did not reduce the margin of safety as defined by the Technical Specifications.

Document No: Job Order C-41528

Title: Repair Annunciator Panel 12-30WL-WLAP

*Description of Change:*

The execution of Job Order C-41528 to repair Annunciator Panel 12-30WL-WLAP (WDS panel) required, for the time of repair, prohibition of activity releases and SGBD system operation. It also required additional people to monitor indications on the gauges, administrative control of certain valves, and draining the waste collection system tanks to lowest permitted level. Implementation of these recommendations decreased the probability of inadvertent activity release.

*SE Summary:*

The change was reviewed and determined not to constitute an unreviewed safety question. Job Order C-41528 to repair Annunciator Panel 12-30WL-WLAP is not related to any Chapter 14 accidents. Measures were to be taken to exclude operations which could require immediate manual interference by operator. Activity releases were to be prohibited for the time of repair. The amount of radioactive waste in any tank would be controlled by a qualified operator monitoring the activity. The proposed activity would affect any design criteria and ensures that all pertinent licensing basis acceptance criteria are met. The adherence to these standards and criteria precluded new challenges to components and systems that could introduce a new type of accident. The administrative measures precluded increase of the amount of radioactive waste in any tank.

Document No: N/A

Title: Technical Direction Memo for Evaluation A156567 01, " CEQ Fan  
Backdraft Dampers"

*Description of Change:*

The subject Technical Direction Memo directs the opening force for the containment hydrogen/recirculation (CEQ) fans backdraft dampers to be maintained at < 9 pounds. These backdraft dampers had been documented as not closing on their own following a fan run. To correct this problem, maintenance proposed balancing the opening and closing force of the backdraft dampers by adjusting the number of plates on the backdraft damper counterweight. The vendor manual for these backdraft dampers (VTM-AWVI-0001) allows for adjustment of the number of these plates and for ensuring that "the blades in the entire damper assembly open and close properly." The purpose of the Technical Direction Memo is to ensure that the maintenance activity does not adversely impact the required function of this equipment or other equipment important to safety.

*SE Summary:*

This technical direction memo was reviewed and determined not to constitute an unreviewed safety question. These backdraft dampers are not initiators for accidents, do not affect the release paths, the frequency of release or the source term for release for any accidents previously evaluated in the UFSAR. The ability the CEQ fans and their associated system to perform their functions are not affected by adjusting the counterweights for these backdraft dampers. The containment pressure response and hydrogen buildup are not affected by this activity. This activity does not affect the failure modes of any component important to safety, or add any new failure modes. The ability of the backdraft dampers to perform their function are unaffected by this activity. In addition, it was determined that this change would not affect the failure modes of any component important to safety, or add any new failure modes. This technical direction memo ensures that this damper can be opened with < 9 pounds after adjusting the counterweight plates. Therefore, it was determined that procedure will not affect the Technical Specifications or their bases.



*Document No:* N/A

*Title:* Valve Inservice Test Program, Revision 1

*Description of Change:*

Corrections have been made in Revision 1 to the Valve Inservice Test Program. The Valve Inservice Test Program describes valve testing requirements using ASME O&M standards, clarifications from NUREG-1482 and specific relief requests. The program is applicable for the third 10-year inspection interval that commenced on July 1, 1996. In addition corrections to technical items, a spell check program was run and all incorrectly spelled words corrected. The systems affected by the changes are Component Cooling Water, Chemical and Volume Control, Containment Spray, Essential Service Water, Main Steam, Post Accident Sampling, Residual Heat Removal and Safety Injection.

*SE Summary:*

The change was reviewed and determined not to constitute an unreviewed safety question. The changes to the Valve Inservice Test Program concern the scope of tests for individual valves. The test program does not describe procedures for completing the tests and therefore does not make any physical changes or create new system configurations that would create a new accident. The changes concern the scope of valve testing and do not make any physical changes or create new system configurations that would create a new failure mode or mechanism. The changes do not affect the basis for any Technical Specification.

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ATTACHMENT 3 TO C0799-08

DONALD C. COOK NUCLEAR PLANT  
COMMITMENTS

## COMMITMENTS

The following table identifies those actions committed to by I&M in this document. Any other actions discussed in the submittal represent intended or planned actions by I&M. They are described to the NRC for the NRC's information and are not regulatory commitments.

Commitment	Date
The supplemental UFSAR submittals will contain UFSAR changes required to support restart in accordance with the CNP Restart Plan.	30 days following Mode 2 entry on each restarted unit.
I&M will complete evaluation of items excluded from the attached 10 CFR 50.59 report and submit a supplementary 10 CFR 50.59 report with the UFSAR restart submittals committed to in Reference 1, addressing these changes as appropriate.	30 days following Mode 2 entry on each restarted unit.





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