

ATTACHMENT

SUPPLEMENTAL
10 CFR 50.59(b) REPORT OF
CHANGES, TESTS, AND EXPERIMENTS

SAFETY EVALUATIONS COMPLETED IN THE PERIOD
JULY 1, 1995 THROUGH JULY 31, 1997

CONSOLIDATED EDISON COMPANY OF NEW YORK, INC.
INDIAN POINT UNIT 2
Docket No. 50-247
March, 1998

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Preface

Discussed herein are description and safety evaluation summaries of changes, tests, and experiments written (or reused from previous periods) at Indian Point Unit 2 and completed from July 1, 1995 through July 31, 1997. These are submitted as a supplement to the description and safety evaluation summaries submitted in December 1997. The changes, tests, and experiments described and summarized herein have been evaluated and determined to meet each of the following criteria as established by 10 CFR 50.59:

Criteria

1. The probability of occurrence or the consequences of an accident or malfunctions of equipment important to safety previously evaluated in the safety analysis report has not been increased.
2. The possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report has not been created.
3. The margin of safety as defined in the basis for any technical specification has not been reduced.

It has, therefore, been concluded that none of these changes represents an unreviewed safety question.

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SUPPLEMENTAL
10 CFR 50.59(b) REPORT OF
CHANGES, TESTS, AND EXPERIMENTS
MARCH 1998

REUSED SAFETY EVALUATIONS DATED PRIOR TO 1995

SE-91-019-TM

ALTERNATE POWER SUPPLIES FOR BATTERY CHARGERS

To support planned outages of 480 V busses with the plant in the cold shutdown mode, alternate temporary power sources were provided for battery chargers 21, 22, 23 and 24. There was only one bus outage and one temporary power source at a time. The source consisted of a temporary cable from a fused disconnect in MCC-24 (for chargers 21 and 23) or in MCC-29 (for chargers 22 and 24). The DC bus configuration and function were not affected. A continuous fire watch was provided. No unreviewed safety question was involved.

SE-91-111-TM

ALTERNATE FEED INSTRUMENT AIR CLOSED COOLING PUMP

An alternate power source was provided for Instrument Air Closed Cooling Pump 22 while repairs were made to the breaker cubicle. Temporary power was provided from MCC-22. The plant was in the cold shutdown mode and the Safety Injection defeat circuit was energized. The instrument air supply was not interrupted, and there was no unreviewed safety question.

SE-92-340-TM

WASTE GAS CHECK VALVE INTERNALS REMOVAL

The internals of the check valve at the suction of waste gas compressor 22 were removed. The removal was necessary because the pressure drop across the check valve was excessive, causing the compressor to operate at reduced capacity. An upstream swing check valve protects against system backflow. Removing the valve internals allows the system to function as designed. It did not involve an unreviewed safety question.

SE-93-051-TM

DURALINE FEED TO SUMP PUMP

A temporary power feed from a nearby Duraline was provided for Containment Sump Pump 210. It allowed the pump to function normally while the bus that normally supplies its power was being maintained. The plant was in the cold shutdown mode, and operability of the pump was not required. There was no unreviewed safety question.

SE-93-052-TM

ALTERNATE POWER SUPPLY FOR REACTOR CAVITY PUMP

A temporary alternate power feed was provided for Reactor Cavity Pump 22 while the bus that normally supplies its power was being maintained. The alternate power feed was from the MCC-28 compartment which normally feeds the Iodine Filter Fan. The plant was in the cold shutdown mode. No equipment functions required by the Technical Specifications were affected. There was no unreviewed safety question.

SE-93-055-TM

DURALINE FEED TO PURIFICATION PUMP

A Temporary power feed from a nearby Duraline was provided for the Low Pressure Purification Pump. It allowed the pump to perform its intended function while the bus that normally supplies its power was being maintained. The plant was in the cold shutdown mode, and operability of the pump was not required. No unreviewed safety question was involved.

SE-93-068-TM

ALTERNATE POWER SUPPLY FOR HEAT TRACING

A temporary power feed from a nearby Duraline was provided for Heat Trace Control Cabinet 22. This cabinet serves heat trace loads associated with the Condensate, Service Water, City Water, and Station Air Systems. It allowed the heat trace circuits to function as designed while the bus that normally supplies its power was being maintained. Loss of power to the heat trace circuits would cause an alarm, and would be investigated by the plant operators. No unreviewed safety question was involved.

**SUPPLEMENTAL
10 CFR 50.59(b) REPORT OF
CHANGES, TESTS, AND EXPERIMENTS
MARCH 1998**

SAFETY EVALUATIONS DATED IN CALENDAR YEAR 1995

SE-95-001-GM

STAIRWAYS, LADDERS, PLATFORMS AND HANDRAILS

To improve personnel safety and access, stairways, ladders, platforms, and other fall protection equipment were added and modified. They were seismically designed and installed. There was no physical or functional effect on the operability of any system or equipment. No unreviewed safety question was involved.

SE-95-003-DE

TRAP REPLACEMENT

The trap for K-48 unit heater in the Unit 2 Turbine-Generator Building was replaced. The type of trap was changed from thermodynamic to thermostatic. The new trap meets system design capacity. There is no operating impact by this change. The system is non-seismic. No unreviewed safety question was involved.

SE-95-004-DE

REPLACE SPRAY ADDITIVE TANK VACUUM RELIEF VALVES

The vacuum relief valves on the spray additive tank were replaced. The installation is seismic Class I, safety related. A seismic evaluation was performed. The replacement valves have no impact on any system function. No unreviewed safety question was involved.

SE-95-005-DE

HOTWELL LEVEL GAUGE ISOLATION VALVE REPLACEMENT

The hotwell level gauge isolation valves were replaced. The valve function is unchanged and there was no impact on the operability of any system or equipment. No seismic equipment was involved. No unreviewed safety question was involved.

SE-95-009-TR and SE-95-010-TR

TEMPORARY AIR REMOVAL LINE REPAIRS

Temporary repair clamps were used to repair elbows in the air removal piping to the condenser. The piping is non-seismic and does not interact with any seismic equipment or system. No unreviewed safety question was involved.

SE-95-012-DE

REPLACE VALVES IN ISOLATION VALVE SEAL WATER SYSTEM

Check valves in the isolation valve seal water system were replaced. The temperature and pressure ratings of the replacement meet or exceed those specified for the system. The valves are seismically restrained. The replacement valve functions in the same manner as the original. No unreviewed safety question was involved.

SE-95-013-DE

REPLACE TEMPERATURE CONTROL VALVE

Temperature control valve TCV-1102 and its operator were replaced. The replacement operates in the same manner as the original. It is not required to be seismically mounted and does not interact with safety related equipment. No unreviewed safety question was involved.

SE-95-016-MD, Rev. 1

MODIFICATIONS TO TURBINE GLAND SEAL STEAM SYSTEM

Modifications were made to ensure that dry steam is supplied to the main turbine gland seals. They included addition of a heat exchanger and a temperature control valve. Steam to the glands is divided into two streams, and one stream is heated in the heat exchanger. The heated and unheated streams flow to a temperature control valve that combines them as required to maintain a preset temperature. Ensuring that steam to the glands is dry reduces erosion. The system is not safety related and has no interface with safety systems or components. No unreviewed safety question was involved.

SE-95-018-DE and SE-95-019-DE

REPLACEMENT OF STEAM HEATING COILS ISOLATION VALVES

The isolation valves for Unit 1 steam heating coils K-1 and K-4 were replaced. This change did not impact any of the system design parameters or the plant's mode of operation. No unreviewed safety question was involved.

SE-95-020-DE

REPLACE AUXILIARY FEEDWATER PUMP EXPANSION JOINT

An expansion joint for the turbine of auxiliary feedwater pump 22 was replaced. The performance of the new expansion joint is identical to the original design. The system functions as originally intended. This component and its mounting are seismically qualified. No unreviewed safety question was involved.

SE-95-021-DE

REPLACE AUXILIARY FEEDWATER PUMP CONTROL VALVE

Valve PCV-1213 controls cooling water to the bearings of auxiliary feedwater pump 22. It was replaced by a valve that will supply cooling water more reliably at design pressure. The replacement does not impact operability. The system functions as originally intended. The valve and its mounting are seismically qualified. No unreviewed safety question was involved.

SE-95-022-DE

REPLACE BRONZE GLOBE VALVE

A 1/4 inch blowoff valve was replaced. The valve is from a different manufacturer than the original but is essentially identical. It has identical ratings and is composed of the same material. No unreviewed safety question was involved.

SE-95-023-DE

REPLACE HEATER DRAIN PUMP DISCHARGE CHECK VALVES

Heater drain pump discharge check valves HD-1 and HD-1-1 were replaced with different model valves. All system design parameters remain unchanged. There are no operating differences between the new and old valves. The replacement valves meet or exceed all design criteria for the system. No unreviewed safety question was involved.

SE-95-024-DE, Rev. 2

REPLACE TURBINE SOLENOID VALVE

A solenoid-operated turbine autostop oil valve was replaced. The replacement valve has a similar body and coil construction but is equipped with class H coil to improve the ambient temperature rating and uses teflon core disk material. There was no impact on plant operation. No unreviewed safety question was involved.

SE-95-025-DE

REPLACE SHAFT KEY

To increase reliability, a key was replaced in the shaft of the manual operator for valves PCV-1190, PCV-1191 and PCV-1192. The vendor has stated that the original key is obsolete and has been replaced by a high-strength key. No unreviewed safety question was involved.

SE-95-027-DE, SE-95-028-DE, SE-95-029-DE, SE-95-032-DE and SE-95-042-DE

REPLACE MAIN STEAM VALVES

Main steam valves MS-848, MS-851, MS-1122, MS-102-58 and MS-642 were replaced. The replacements operate in the same manner as the original valves. They are constructed of materials that are in accordance with the Unit 2 design specifications. System parameters were not changed or affected. No unreviewed safety question was involved.

SE-95-031-MM

REPLACE HYDROGEN RECOMBINER VALVES

Obsolete valves associated with the hydrogen recombiners were replaced by valves from a different manufacturer. The valves perform as before and the valve capacity is the same. The new valves are made of stainless steel, which is compatible for the service. They are seismically qualified and installed. No unreviewed safety question was involved.

SE-95-033-DE

REPLACE SPRINGS IN FEEDWATER HEATER LEVEL CONTROL VALVES

Actuator springs were replaced in LCV-1101, LCV-1102 and LCV-1103. These are level control valves for high-pressure feedwater heaters. The valve function is unchanged but the new actuator springs provide better control characteristics. The replacement springs

meet or exceed all design criteria for the system. No unreviewed safety question was involved.

SE-95-035-DE

UPGRADE SEALS OF SERVICE WATER VALVES

Improved seals were installed on service water valves SWN-41-x and SWN-44-x. The new seals improve the seal capability and facilitate maintenance. They did not have a negative impact on the operability of the service water system or any interfacing system. Seismic capability of the valves was not affected. No unreviewed safety question was involved.

SE-95-036-DE

REPLACE OIL TRANSFER VALVE

Oil transfer valve MTO-500 was replaced. This is a three-way valve that is part of the turbine lube oil system. The replacement valve is similar to the existing valve, but more reliable. The system is not Class A or seismic. This replacement had no impact on plant operation. No unreviewed safety question was involved.

SE-95-043-DE

REPLACE WELD CHANNEL PRESSURIZATION SYSTEM VALVE

Relief valve WCPS-79 in the weld channel pressurization system was replaced. The new valve functions in the same manner as the original valve and meets system specifications for pressure and temperature. It is seismically restrained. No unreviewed safety question was involved.

SE-95-044-MD, Rev. 1

CONTROL VALVE REPLACEMENT

The Drains Collection Tank Primary Water Flow Control Valve was removed and a new valve (FCV-10001) was installed, along with a new flowmeter and controller. This modification restored the controls in the Control Room, enhanced reliability, and allowed the operators to set the valve for the desired flow rate. It did not impact the safety related function of the primary water system or any equipment addressed in any accident analysis. No unreviewed safety question was involved.

SE-95-045-TM

COOLING WATER SUPPLY TO VACUUM DEAERATOR

A hose was connected to provide cooling water to the Vacuum Deaerator. It bypassed a clogged valve (RW-122) to restore normal flow. There was no safety equipment affected. No unreviewed safety question was involved.

SE-95-046-TM

INSTALL CLAMP-ON AMMETER PROBES

Four clamp-on ammeter probes were temporarily installed to monitor currents on the bistable outputs of intermediate range nuclear instrument channel N-36 for troubleshooting. The probes were non-intrusive, being installed around existing wires. No unreviewed safety question was involved.

SE-95-047-TM

INSTALL TEMPORARY STEAM DUMP CONTROL WIRE

A failed wire in the turbine steam dump control circuit was temporarily replaced. The replacement was a single conductor which followed a different routing from the original. The steam dump provides a bypass for steam from the exhaust of the high pressure turbine directly to the condenser when there is a turbine trip, overspeed trip, or the generator breaker opens. The temporary wire restored the function of the steam dump. The circuit provides no safety related function. There was no effect on any other system. No unreviewed safety question was involved.

SE-95-048-TM

REMOVE WELDING RECEPTACLE

A welding receptacle near the main condenser and associated conduit were temporarily removed to facilitate the condenser replacement. A welding machine was hard-wired at the same terminus that fed the receptacle. No cables were routed over or through cable trays and no class 1E equipment was affected. No unreviewed safety question was involved.

SE-95-049-TM and SE 95-050-TM

TEMPORARY POWER SUPPLIES FOR REFUELING OUTAGE

Additional electrical power supplies were provided inside containment for the 1995 refueling outage. Cables were run only while the outage was in effect and energized only after the unit was in cold shutdown. Equipment was overload protected and compatible with ambient conditions. These feeds were used only for the outage and did not impact any cable trays or any equipment needed during cold shutdown. No unreviewed safety question was involved.

SE-95-051-TM

TEMPORARY POWER SUPPLY TO TRAILER

A temporary electrical power feed was run from the Maintenance and Outage building to a trailer. It was fed from a circuit that is not safety related. No class 1E equipment was impacted. No unreviewed safety question was involved.

SE-95-055-TM

PROVIDE TEMPORARY VACUUM FILL PATH FOR REACTOR COOLANT SYSTEM

Pressurizer safety valve PCV-464 was temporarily removed and a manual 2-1/2 inch isolation valve was installed. This temporary modification provided a suction path for vacuum refilling the reactor coolant system. The installed valve was sealed open when not required to be closed for vacuum refill purposes. The safety valve was reinstalled before exiting the cold shutdown condition. No unreviewed safety question was involved.

SE-95-060-DE

REPLACE CHEMICAL AND VOLUME CONTROL SYSTEM VALVE

Level Control Valve LCV-112B in the Chemical and Volume Control System was replaced. The only difference between the original valve and the replacement was the model number, and the application of an upgrade to the valve. There was no impact on the system or equipment during any operating mode or condition. Installation of the valve is identical to the original. Seismic acceptability was maintained. No unreviewed safety question was involved.

SE-95-062-DE

REPLACE BUTTERFLY VALVE

Butterfly valve 1863, and its motor actuator, were removed and replaced by a manually operated butterfly valve. This valve is opened during refueling operations to transfer water to the Refueling Water Storage Tank, and during abnormal conditions for alternate external recirculation. The original valve was never electrically connected. The original valve had a rubber-lined seat and a stainless steel disk. The replacement has a stainless steel seat and a nickel plated disk. Materials are suitable for the service environment. The installation is Seismic Class I and safety related. No unreviewed safety question was involved.

SE-95-063-PR

ROD CLUSTER CONTROL ASSEMBLIES (RCCAs) INSPECTION

RCCAs were inspected to ensure that all RCCAs were capable of performing in accordance with Technical Specification Requirements. Both visual (using a high-magnification camera) and eddy current inspections were performed. The work was done in the spent fuel storage pool, and did not require movement of spent fuel. No unreviewed safety question was involved.

SE-95-064-EV

SAMPLE BOTTLE EFFECT ON FUEL OIL STORAGE TANK

A plastic sample bottle was inadvertently dropped in the fuel oil storage tank. The effect of the bottle in the tank was evaluated. The bottle is likely either floating on the liquid surface or at the bottom of the tank. However, even if the bottle is pulled to the pump

suction, it would not impede pump operation because the design of the pump suction bowl would prevent the bottle from passing into the pump. The fuel oil system will function without interference from the sample bottle. No unreviewed safety question was involved.

SE-95-067-PR, Rev. 1

VACUUM REFILL REACTOR COOLANT SYSTEM

A procedure for refilling the Reactor Coolant System (RCS) after refueling or maintenance was developed and used. For this procedure, a vacuum is drawn on the RCS to expedite its refill. The vacuum was drawn by a vacuum pump connected to the pressurizer (refer to SE-95-055-TM). The vacuum pump exhausted to the Containment Building Purge Exhaust duct. During the initial refill by this procedure, performance of the Residual Heat Removal system was monitored closely to verify that it could deliver the required flow. Performance of level monitoring instrumentation was also monitored. This procedure does not involve an unreviewed safety question.

SE-95-068-DE

RESIDUAL HEAT REMOVAL (RHR) VALVE GALLERY PENETRATION ENLARGEMENT

This modification is a wall penetration enlargement in the RHR valve gallery. The steel cover plate was replaced with a steel cover plate with lead shielding inserts. The wall and cover plates will remain functional following a seismic event. There was no new failure mode and no impact on any system or equipment. No unreviewed safety question was involved.

SE-95-071-DE

REPLACE FIRE PROTECTION SYSTEM GATE VALVES

Gate valves in the fire protection system were replaced with essentially identical valves. The materials and coatings of the new valves are compatible with the system. The replacement valves are UL/FM approved and were manufactured for fire protection use. There was no impact on structural integrity or operability of the system. No unreviewed safety question was involved.

SE-95-073-DE

MAIN STEAM ISOLATION VALVE REPAIR

Bonnet studs and stud holes of Main Steam Isolation Valve MS-1-21 were repaired. The modification decreased the body area but evaluation verified there was no adverse effect on the valve. Valve operability was not affected and there was no change in seismic loading. No unreviewed safety question was involved.

SE-95-075-DE

REPLACE VALVE UW-250 WITH BLIND FLANGES

Valve UW-250 was locked closed and has never been operated. It was removed and replaced with two blind flanges. This replacement does not affect the plant's mode of

operation. Materials are compatible with the installation. The valve was non-seismic and did not interact with any seismic installation or system. No unreviewed safety question was involved.

SE-95-076-DE, Rev. 1

REPLACEMENT OF SAFETY INJECTION (SI) PUMP MECHANICAL SEALS

Replacement of the SI pump Chesterton 442 Split Mechanical Seals Stationary Face from Carbon to Silicon Carbide did not impact any system's design pressures, temperatures, flow rates, or other parameters. The new Mechanical Seal Stationary Face, which is harder material and compatible with the SI System environmental conditions, meets and exceeds the design requirements. They were installed Seismic I, and safety related as the originals. Being almost identical to the original, they do not alter instruments or controls that could impact analyzed accident response times or the response characteristic of other instrumentation. There was no impact on any electrical system or loading, no new failure mode was introduced. No unreviewed safety question was involved.

SE-95-076-TR

TEMPORARILY REPAIR BACKSEAT AREA OF CONTROL VALVE

During disassembly of PCV-1139, the backseat area of the bonnet was damaged. The affected area was machined to remove upset material. The valve stroke was adjusted, within design specification limits, to assure that the plug could not contact the backseat area. The safety related function of the valve, to control steam pressure to the turbine driven auxiliary feedwater pump, was not affected by the repair, nor was operability. Backseat capability is not required. Design pressure and other design parameters were not impacted. No unreviewed safety question was involved

SE-95-077-DE

REPLACEMENT OF LIMIT SWITCHES

The original Fuel Transfer System Conveyor Car Proximity Limit Switches manufactured by General Equipment and were no longer available. Replacement switches, manufactured by General Equipment, meet all the design characteristics of the original. The new switches have the same form, fit and function as the original. Approximately 80' of original wiring from the switch to the control panel were replaced with new equivalent wiring. This change does not affect any system's design pressures, temperatures, flow rates or other parameters. No unreviewed safety question was involved.

SE-95-079-DE

REPLACEMENT OF MANWAY INSERT PLATE FASTENERS

The installation of new pressurizer manway insert plate fasteners provides an improvement over the original design in that they are of sturdier construction and simplify the actual installation. This modification does not affect operation nor qualification of equipment important to safety and no radiological consequences are

affected. It will not increase the consequences of an accident previously analyzed. No unreviewed safety question was involved.

SE-95-080-GM

INSTALLATION OF QUICK CONNECTORS

This generic modification replaced existing rigid electrical connections with quick connectors for EQ devices such as operators for motor operated valves, solenoid valves, switches, pressure, flow and temperature switches. The quick connectors reduce radiation exposure during replacement of existing equipment and installation of new, reduce manhours for installation and also reduce failures during Preventive Maintenance and Testing. The connections are made with a Raychem splice and environmental seal is provided via an RTV seal. These quick disconnects are qualified by Environmental Quality tests which meet IP2 specific harsh environmental conditions. This change does not impact operability of any systems and no new failure modes are introduced. There were no changes in power supplies to the affected EQ equipment. No unreviewed safety question was involved.

SE-95-081-DE

VALVE STEM AND ACTUATOR REPLACEMENT

The replacement of a 10" Fisher 9500 Butterfly Valve stem and actuator in the Service Water System have no adverse impact on the component's failure modes. There are no material changes which interact with system fluids. The stem material is identical and the actuator is designed for the environmental conditions it will be subjected to. This change has no impact on Class 1E equipment and does not involve electrical equipment. The new stem and actuator is restrained in the same manner as the original. No unreviewed safety question was involved

SE-95-082-DE

REPLACEMENT OF RESTRICTION ORIFICE

Replacement of the Restriction Orifice in the boiler feed pump DC Oil Pump Auto Start Test Sensing Line restored the test loop to the design condition. This is strictly a mechanical change and did not impact any electrical parameters or the capacity and/or voltage of any electrical system. The new orifice meets all design criteria for the system, it is not subject to the ISI/IST requirements. No unreviewed safety question was involved.

SE-95-083-TM

JUMPER TO ALLOW FOR GAS DECAY TANK RELEASES

This jumper prevented RCV-014, Waste Gas Decay Tanks Discharge Valve to the plant vent, from automatically closing due to high radiation on R-44. It was needed in order to perform a release of the Gas Decay Tanks. If at any time the release needed to be terminated the operator could manually close RCV-14. The contents of the tanks were released only when prior to the release at least 2 independent samples of the tank contents were analyzed and at least two technically qualified members of the staff independently

verified the release rate calculations and discharge valve line-up. This jumper was only installed while the plant was in cold shutdown and all the fuel is removed from the core. Installation of this jumper did not represent a reduction in the margin of safety. No unreviewed safety question was involved.

SE-95-084-DE

REPLACEMENT OF TEMPERATURE SWITCHES

Six temperature switches associated with the Emergency Diesel Generators were replaced. The United Electric replacement switches function in the same manner as the original switches. Higher pressure rating of the new switches meets the pressure rating and temperature ratings that are specified for the system. The switches will function after a seismic event because they are physically attached to the EDG skid that has been seismically evaluated. This change had no effect on Class 1E equipment nor electrical system capacity. No unreviewed safety question was involved.

SE-95-085-DE

ANTI-SWEAT INSULATION REPLACEMENT

The new Service Water anti-sweat insulation replacement is compatible with the piping material and will be encapsulated in stainless steel to prevent it from dislodging during DBA conditions. This replacement will have no impact on the operability of the system or any of its interfacing systems, nor will it impact or be impacted by the plant's mode of operation. This change has no impact on the electrical system or any Class 1E equipment. The insulation was evaluated on the "Fire Protection Appendix R Review and Combustible Loading Summary" form and was found to be acceptable. The new insulation essentially weighs the same as the original. No unreviewed safety question was involved.

SE-95-086-DE

REPLACE VIBRATION TRANSDUCERS

Vibration probes were replaced on the main turbine and the main feed pumps. The replacement Velomitors increase vibration data sensitivity and repeatability. This will enhance the operability of the system and not impact the plant's mode of operation. Failure modes caused by the spring degradation of the original velocity transducers will be eliminated. Existing cables will be utilized for this change and replacement probes will be mounted on the existing mounting housings connected to the bearing caps assuring seismic restraints. No unreviewed safety question was involved.

SE-95-087-TM

PROVIDE BACKUP SOURCE OF PRESSURE

The jumper provided a back-up source of N₂ to the Spent Fuel Pool (SFP)/Canal Gate Seal to prevent loss of inventory in the pool if the seal failed. It contained a check valve to prevent depressurization of the seal if the jumper should fail. In the event that both the jumper and Station Air (SA) failed and inventory was lost, the SFP low level alarm would

alert operators to implement the appropriate procedures to mitigate this situation. The redundancy of the system was increased by the use of an N₂ back-up system. The jumper fittings and connection were leak tested upon installation, and the bottle and associated tubing were secured such that it would not impact other equipment during a seismic event. No unreviewed safety question was involved.

SE-95-089-MD

MAIN TURBINE RUNBACK

Unit 2 is equipped with a control system that initiates a turbine-generator runback on loss of one main feedwater pump. The runback circuit was installed to avoid a reactor trip due to low steam generator level, and also to avert operation of the pressurizer power operated relief valves. Due to the increase in licensed maximum reactor power and other changes, it became necessary to modify and retune the control system for optimum performance. A bistable was added to an existing instrument loop that measures turbine first stage pressure. The bistable replaced a pressure switch. The timers that control the runback were also readjusted. No safety related equipment was modified. No Technical Specification was affected. Potential reactor trips and challenges to the power operated relief valves were minimized. No unreviewed safety question was involved.

SE-95-090-DE

REPLACEMENT OF SMALL BOLT OR STUD

The replacement of 1/2" or smaller bolt or stud with A. B. Chance ground ball stud will not introduce any new failure modes or impact the operability of any system or component where it is used. The new cadmium plated stud is materially compatible with any existing bolts or studs that it may replace. The bolt by its nature is seismically restrained in the equipment by virtue of it being bolted and torqued after installation. There is no change on Class 1E equipment, no impact on the electrical system. No unreviewed safety question was involved.

SE-95-091-DE

VALVE REPLACEMENT

The replacement of valve SA-8 in the Station Air System meets the requirements of the system's design and operation. It is installed, functions and operates in the same manner as the original. The replacement is non-electrical, presents no change to non-1E equipment. No unreviewed safety question was involved.

SE-95-092-PR, Rev.1

TEMPORARY LEAKOFF COLLECTION SYSTEM

The temporary Reactor Coolant Pump (RCP) backseat leakoff collection system was utilized during shutdown refueling operations to prevent crud intrusion into the RCP seal package. The RCP seal injection is not safety related. The temporary installation did not affect the safety related function of the Chemical and Volume Control System or Reactor Coolant System in any way. Materials of the temporary system are compatible with the

process fluid. Temporary operating instructions included precautions and limitations to insure the safe operation of the temporary leakoff collection system. Temporary power to the leakage collection system pumps and controls was provided via duraline feed, which was evaluated separately and found to be acceptable. The system was restrained to preclude interaction with safety related equipment and all its cable routing was removed from the RCS and containment upon recoupling of RCP's. There was no impact on the Emergency Diesel Generators Station Batteries, EQ Program, or ISI/IST Program. No unreviewed safety question was involved.

SE-95-093-PR, Rev. 1

TEMPORARY SEAL INJECTION SYSTEM

A temporary Reactor Coolant Pump (RCP) Seal Injection System and associated procedure was required for RCP seal injection to preclude the intrusion of foreign material into the seal package when the normal Chemical Volume and Control System (CVCS) is out of service during refueling. This system is non-safety related and is used only when the reactor is defueled. Installation and operation of the system does not affect the safety related function of the CVCS, RCS or Residual Heat Removal System in any way during this plant mode. Materials of construction for the temporary system are compatible with the process fluid and failure of the pump or filter is mitigated by redundancy in the design. Power to the temporary seal injection pump and its controls was provided via Duraline feed, which was evaluated separately and found to be acceptable, and removed when the system was no longer needed. The temporary system was restrained to preclude interaction with safety related equipment. There was no impact on the Emergency Diesel Generators Station Batteries, EQ Program, or ISI/IST Program. No unreviewed safety question was involved.

SE-95-094-PR

STEAM GENERATOR LEAK TEST

With the plant in cold shutdown, steam generators were leak tested using fluorescein. Under ultraviolet light, fluorescein emits an intense yellowish-green color. The leak test consisted of the following:

- Providing appropriate supports for the additional weight of water to be added.
- Filling the steam generator under test and its steam line with water, then adding fluorescein to a concentration of approximately 5 ppm.
- Pressurizing the steam generator with nitrogen to approximately 800 psi.
- Using an ultraviolet light in the channel head to identify and locate any leakage.
- Draining and refilling the steam generator and returning it to the wet layup condition.

The use of fluorescein was evaluated and shown to be acceptable. No chemistry limits or industry guidelines were exceeded. The pressure was within design limits. No unreviewed safety question was involved.

SE-95-096-DE

GATE VALVE REPLACEMENT

The replacement of Crane 800# Gate valves with Velan valves are a mechanical change. The materials of the new valves have been considered for compatibility with the original installations and are acceptable. The equipment associated with this change meet or exceed all design criteria for the "high energy" system on which they are installed. No unreviewed safety question was involved.

SE-95-100-DE

REPLACE SPLIT RING IN GLOBE VALVE

The split ring in a Rockwell-Edwards globe valve was replaced by a ring of different materials. The new materials are compatible with the existing installation. The change did not impact the operability of any system or equipment, and did not involve an unreviewed safety question.

SE-95-101-DE

GASKET REPLACEMENT

The Main Steam Reheater Crossunder piping manway gaskets were replaced. The replacement did not create a new failure mode, impact operability of any equipment or impact the plant's mode of operation. The new gasket material is compatible with the materials of the Reheater Crossunder System. There was no electrical equipment involved in the modification. No unreviewed safety question was involved.

SE-95-102-DE

VALVE REPLACEMENT

Valve CW-1 was replaced. The replacement valve for CW-1 operates in the same manner as the original. It does not change the system parameters nor affect the plant's mode of operation. Materials of the replacement are compatible with the original. CW-1 is non-electrical and non-seismic. It does not impact ISI/IST. No unreviewed safety question was involved.

SE-95-103-DE

GASKET REPLACEMENT

A Low -Pressure Turbine Inner Case Gasket was replaced. This is a non Class A system. The replacement did not create a new failure mode, impact operability of any equipment or impact the plant's mode of operation. The new gasket material is compatible with the materials of the LP turbines. There was no electrical equipment involved in the modification, the gaskets are not pressure boundary. No unreviewed safety question was involved.

SE-95-105-DE

REPLACEMENT OF VALVES

Replacement of the Waste Disposal System (WDS) check valves 1758 & 1760 with new Conval valves is an upgrade to the system. The new valves function in the same manner as the original, and exceed the pressure and temperature ratings that are specified for the system. The valves are seismically restrained per the original design. They will function after a seismic event because they are physically attached to WDS piping that has been seismically evaluated. The WDS is not a high energy system. No unreviewed safety question was involved.

SE-95-106-TM

REROUTE INSTRUMENT AIR

This jumper enables calibration and testing of conventional plant instruments and valves with an otherwise un-isolatable section of the instrument air header removed. It did not impact the operability of any system or equipment during any plant condition, and no new failure modes were introduced. This change did not impact nor was it impacted by the plant's mode of operation. The jumper was a mechanical change only and did not impact any electrical parameters. It was a temporary change which was restored to normal configuration prior to startup from the 1995 Refueling Outage. No unreviewed safety question was involved.

SE-95-107-MM

REPLACE CARD READERS

New card readers, compatible with the existing security computer, were replaced on the bridge between Indian Point 2 and Indian Point 3. No system parameters were affected and no new failure modes were introduced by this change. The new card reader wiring was connected to existing fanning strip in the card reader enclosures utilizing the existing cable and mounted on existing card reader housings. A guard was posted by the card readers during installation to secure the door. There were no changes to electrical systems or loadings. No unreviewed safety question was involved.

SE-95-108-TM

FAULTY ALARM

This jumper was installed on Panel 23A Electric Heat Trace (EHT) CKT 4 which was masking other alarms associated with panel 23A EHT. CKT-4 was a heat trace used to maintain temperature on lines on piping from the concentrates holding tank. The piping is no longer used and has no function. The lifted wire was taped and will remain secure in the control panel and does not interfere with panel functions. Although the piping is still classified as Class A, there is no safety related function to the equipment serviced by this jumper. This jumper had no effect on EHT circuits associated with required safety related boration paths. No unreviewed safety question was involved.

SE-95-109-TM

INSTALL JACKING ASSEMBLY

This jumper allowed 22 Steam Generator Blowdown Bypass Valve MS-115B, which was failed closed, to be jacked open or closed without affecting pressure boundaries associated with the valve. It required installation of a compatible all-thread jacking assembly between manual valve actuator and valve bonnet. The valve does not have any safety related function and is not required to function as a Containment Isolation Valve (CIV). There was no increase in the consequences of equipment malfunctions previously evaluated. No unreviewed safety question was involved.

SE-95-110-TM

TEMPORARY POWER SUPPLY

This jumper supplied power to a temporary trailer from existing disconnect switches #2 and #3 in the Maintenance and Outage Building Light and Power Room. The feeds were powered from spare 100 amp disconnect switches using # 2 wire. This change did not adversely impact any system's design parameter and no new failure mode was created. The jumper did not adversely impact the electrical system. No unreviewed safety question was involved.

SE-95-113-TM

USE WATER FROM FIRE PROTECTION SYSTEM TO FLUSH CONDENSER TUBE SHEETS

A hose was connected to supply water from the fire protection system to flush the condenser tube sheets. The amount of water used was within previously established guidelines. Instructions were provided to personnel to secure its use if a fire was detected or a fire alarm was heard. No unreviewed safety question was involved.

SE-195-114-TM

JUMPER FOR MAIN LUBE OIL SEAWATER MAGNETROL

A temporary blocking device was applied to a magnetrol (level switch) on the main turbine-generator lube oil system. It allowed the separator to operate normally, using a supply from the clean oil storage tank, while the main lube oil tank was drained. It was applied while the main turbine was out of service. There was no impact on turbine operation or to the plant operating mode. There was no unreviewed safety question involved.

SE-95-115-TM

HEATER DRAIN TANK PUMP CONTROL PANEL EMERGENCY LIGHT

This jumper prevented the Heater Drain Tank Pump (HDTP) Control Panel Emergency Light from illuminating on the HDTP control panel during removal of the normal power supply during a tagout for maintenance. The change was acceptable since the heater drain pumps were secured due to the plant being in cold shutdown. Electrical tape wrapped around the wire lifted from relay BF66 was approved for this type of removal. This jumper was removed and the wire was restored to its original position before the control

panel was needed for pump startup. No electrical loads were added, changed or revised. No unreviewed safety question was involved.

SE-95-116-TM

FUEL TRANSFER TUBE GATE VALVE INTERLOCK

This jumper defeated the Fuel Transfer Tube Gate Valve Interlock preventing movement of the fuel through the tube with the gate valve closed. It was only applied during fuel movement operations. The only failure mode was possible movement of the trolley through the tube with the valve closed. Tagging the valve open kept the valve from interfering with trolley movement. This meets both the requirements for VC isolation above 200 F and preventing moving the trolley through the tube with the valve shut. The trolley and valve are not class 1E, no electrical loads were added, changed, or removed. No unreviewed safety question was involved.

SE-95-117-TM

CLEAR CATEGORY ALARM

This jumper was used to clear a category alarm due to bad vibration probe on 25 Circulating Water Pump (CWP). Wires were taped together using approved electrical tape which is compatible with the original installations. The change did not impact any system's parameters and no new failure mode was introduced. No unreviewed safety question was involved.

SE-95-123-PR

PERMANENT THREAD REPAIR

The female threads of Turbine Stop Valve MS-864 bonnet were redrilled to specified size and helicoils permanently installed in the valve body. Helicoil repair is ASME Code repair and could be used in Class A installation. All design requirements are maintained and it does not affect the operation of the valve in normal or transient operation. There was no electrical equipment involved in the repair. No unreviewed safety question was involved.

SE-95-124-MD, Rev. 2

SYSTEM INSTALLATION

The installation of the Fish/Debris Return System and Security System Modification, located at the north end of Unit #2 intake structure, had no direct or indirect bearing on the operation of any safety related equipment. The security modification added a minor electrical load to existing IP-1 supplied circuits. These modifications had no impact on existing plant structures. No unreviewed safety question was involved.

SE-95-125-DE

REPLACEMENT PUMPS

The replacement of Safety Injection Circulation Pumps (SICP) 21,22 & 23 did not affect the plant's mode of operation and no new failure mode was introduced. The new

material is stainless steel vs carbon steel for the original, and is compatible with the Component Cooling Water (CCW) fluid. Pumps are mechanically redundant to each other and there is no change in load to any vital bus. Replacement pumps are identical to the original pumps in weight and are mounted to the pedestal and piping the same way. The pumps are included in the IST Program for pumps. No unreviewed safety question was involved.

SE-95-126-RP

REPAIR OF PUMP CASING

A mechanical repair to #22 Main Boiler Feed Pump casing was made using metal lacing plug material which is metallurgically compatible with the casing parent material. The plug was threaded into the existing casing which is properly supported to the building steel. The repair did not impact and was not impacted by the plant's mode of operation and no new failure mode was introduced. It did not impact the electrical system and there was no impact on Class 1E equipment. No unreviewed safety question was involved.

SE-95-128-DE

MATERIAL CHANGE

The new MS-42 Discharge Liner Piston Ring material was changed by the manufacturer, the parts are still similar to the original parts. The valve function and operability remained the same. There was no impact on the plant's mode of operation and no new failure mode was introduced. No unreviewed safety question was involved.

SE-95-130-MM

CHECK VALVE LEAK DETECTION INSTRUMENT SYSTEM

Installation of the Safety Injection & Residual Heat Removal Check Valve Leak Detection Instrument System did not alter the function of Post Accident Monitor transmitter FT-946B. It assists in determining that motor operated valves 746 & 747 are functional in the unlikely event that two check valves which isolate the RCS pressure from the above valves are leaking through and causing pressure to build up on the downstream side and between the double disks of the motor operated valves 746 & 747. FT-946B must remain operational during Post Accident conditions and after a seismic event. Failure of the pressure boundary of the new system would affect the operation of FT-946B. In order to protect this boundary the new pressure loop was designed per Class A system criteria. Materials for this modification are excellent in high pressure and corrosive environments. This modification does not change the safety related function of any equipment. All equipment installed is seismically supported. No unreviewed safety question was involved.

SE-95-131-MD

EVALUATION OF CYCLE 13 CORE LOAD

This change involved movement of fuel (including new VANTAGE + assemblies) into the Cycle 13 core during refueling operations. The new fuel (Zirlo) is similar to the

design of previously evaluated fuel types and compatible with the existing fuel handling equipment. The replacement control rods are similar in weight and design, and are mechanically equivalent to the replaced control rods. There is no change with regard to seismic events. Fuel handling accidents have been addressed and the consequences of each accident are not affected by the new fuel. Handling of the fuel was done with approved procedures and within Technical Specification parameters. There were no new failure modes introduced. No unreviewed safety question was involved.

SE-95-132-DE

REPLACEMENT OF LEVEL TRANSMITTERS

Existing Fan Cooler Unit E 13 DM transmitters were replaced with new identical Model NE 13 DM Foxboro transmitters that perform similarly. The transmitters measure the Weir level in the stand pipe. They use the same DC power supply in the CCR cabinets and the method of calibration is still the same. Transmitters are seismically qualified and likewise installed. There was no change to the electrical loading on vital or non-vital busses, no impact to a high energy system. No unreviewed safety question was involved.

SE-95-133-DE

HIGH LEVEL MAGNATROL REPLACEMENT

The new High Level Magnatrol 63-L66 on the Stator Water Tank will operate in the same manner as the original. Materials of the new magnatrol are compatible with the original and no system parameters are changed or affected. The magnatrol is not class Class 1E equipment and is non-seismic. No unreviewed safety question was involved.

SE-95-134-DE, Rev. 1

BUS CONNECTION HOUSING REPLACEMENT

The original Isophase Bus Connection Housing was replaced with an Isophase Bus Connection Housing with Doors. The replacement does not affect any system parameters nor the plant's mode of operation. Materials of the new housing are compatible with the original. The new housing does not change the electrical loading, cable or routing. No unreviewed safety question was involved.

SE-95-135-DE

REPLACE THREADED HOLES

Threaded holes for Hydrogen Cooler Heads were replaced with Helicoils. Materials of the new threaded holes are compatible with the original installation and operate in the same manner as the original. This replacement does not affect any system parameters nor the plant's mode of operation. There is no change to the electrical loading. No unreviewed safety question was involved.

SE-95-136-DE

REPLACE CVCS VALVE

A Rockwell Edwards Seal Injection Filter Outlet Stop Valve was replaced with a Conval valve in the Chemical Volume and Control System. The new valve is of the same design rating as the original, and materials for the body and bonnet are identical. Since the C_v is essentially identical between new and original (62 vs 60), there are no system flow impacts. The internal trim for the new valve does not contain Cobalt, which meets the new specification for valves connected to the RCS. There is no adverse impact on the seismic capability of the Seal Injection Header with this change. The RCP Seal Injection Header is a high energy system. However, this change does not affect postulated line break locations. No unreviewed safety question was involved.

SE-95-137-DE

VENT VALVE REPLACEMENT

This change replaced 24 Safety Injection Accumulator Outlet Vent Valve S-33. Function of the manual valve will remain the same. There is no impact on any Class 1 E equipment or electrical system. The original valve had stellite seat material and the new valve has Nitronic 60 (nonstellite) seat material which is better for ALARA. This change does not alter any high energy line consideration addressed with the original valve nor impact the requirements of the ISI/IST program. No unreviewed safety question was involved.

SE-95-138-EV

TUBE RE-ROLL

The tube re-roll criteria defines a length of expanded and undegraded tube engagement within the tubesheet bore, below which, defects can exist and remain in service provided the tube satisfies the IP-2 Technical Specification F* criteria. The re-roll joint provides sufficient structural strength, as prescribed by F* criteria, to withstand normal operating and faulted condition loads in accordance with Regulatory Guide 1.121 safety margin requirements. The tube re-roll distance also provides resistance to leakage conservatively within plant technical specification leakage limits. The Steam Generator, Reactor Coolant pump/motor and turbine valve settings, and the secondary side operation for feedwater, auxiliary feedwater, blowdown, and outage maintenance are not affected by tube re-roll implementation. The use of the re-roll tubes to maintain their service does not represent an unanalyzed safety concern. Their use does not increase the risk of creating an unanalyzed accident nor does it reduce the margin of safety. No unreviewed safety question was involved.

SE-95-139-DE

REPLACE CVCS VALVE

This change replaced CVCS Valve, C-89. There is no impact on any Class 1 E equipment or electrical system. Materials for the body and bonnet are identical between original and new. The internal trim for the replacement valve does not contain Cobalt,

which meets the new specification for valves connected to the RCS. The replacement is of the same design rating as the original. The C_v value for the replacement is greater than the original (10 vs 6), which improves the venting capability. Piping will remain seismically supported. This replacement valve does not alter any high energy line consideration addressed with the original valve nor impact the requirements of the ISI/IST program. No unreviewed safety question was involved.

SE-95-140-DE

REPLACEMENT OF VOLUME ASSEMBLY

The R-54 skid contains a liner, a well, and a flange that are bolted together into one unit which is called a volume assembly. To limit radioactivity build-up, the replacement assembly contains a 0.001 inch thick coating baked onto its internal surfaces. The only failure modes associated with the new assembly is the flaking off of the coating. A catastrophic failure could stop flow. This would be indicated in the CCR, terminating the discharge and precluding an unmonitored release. Minor flaking could cause background build-up and increase radioactivity buildup at rates comparable to those associated with non-coated liners. In either case, the integrity of the skid and assembly is maintained, since the composition and dimensions of the assembly's components have not been altered. No unreviewed safety question was involved.

SE-95-141-DE

REPLACEMENT OF LOCK NUTS

This change replaces original sampling valve lock nuts manufactured to specification A307 with lock nuts manufactured to SAE J995C Grade 2. Materials of the change are compatible with the original installation including the effects of metal interactions, radiation exposure, corroding, paint and protective coatings. The change is mechanical and does not impact any electrical system, vital cable or cable trays. This change has no impact on EQ or any plant structure. No unreviewed safety question was involved.

SE-95-142-DE

VALVE REPLACEMENT

The newly installed Posi Seal Valves in the Service water System have improved corrosion resistance, performance and service life. This change has no effect on the operability of the service water system nor any of its interfacing systems. It has no impact on any Class 1E equipment nor electrical system. No unreviewed safety question was involved.

SE-95-143-TM and SE-95-144-MD

CONTAINMENT SPRAY ACTUATION

Containment spray is actuated by coincidence of two trains of logic circuits. Each train has three channels of containment pressure instrumentation, with 2/3 coincidence required to initiate. The actuation circuitry had cross-train connections through the interlock with the safety injection sequencing relays. The circuitry was modified to

provide channelization for the two trains and eliminate a potential cross-train inhibition of containment spray actuation. The interlock meets the single failure criterion. The modification did not affect the sequencing of the spray pumps during a safety injection. The modification was first installed during cold shutdown when containment spray was not required. It was tested and found acceptable and then made permanent. No unreviewed safety question was involved.

SE-95-146-PR

REPLACEMENT OF DEFECTIVE INCORE THERMOCOUPLES AND CONNECTORS

The removal and installation of defective or erratic incore thermocouples or connectors of the same make and model in accordance with approved maintenance (EMS-B-011) will enable more thermocouples or connectors to be in service. There is no impact on electrical loadings and no new failure mode introduced. The Core Exit Thermocouple Monitoring System, which is a Regulatory Guide 1.97 commitment, was restored to the as designed configuration. No unreviewed safety question was involved.

SE-95-147-TR

TEMPORARY SEAL WELD REPAIR

FE-1112 is an orifice housed by a Union, Brass 2", that changes air flow on the Instrument Air line. The threads connecting the Union to the piping were leaking air and a temporary weld seal had to be utilized to contain the leak. The FE-1112 will function as designed and there is no effect on the Instrument Air System. This is a mechanical material addition which did not affect the seismic adequacy of the Union. No unreviewed safety question was involved.

SE-95-148-DE

REPLACED DAMAGED ROOF OF CONDENSATE STORAGE TANK

This change involved replacing damaged roof material of the Condensate Storage Tank. The original 1/4 inch thick plates were replaced with 5/16 inch thick plates of the same material. Calculations have been performed to assure there are no tank strength, seismic qualification, or system's design pressures, temperatures, flow rates or other parameters adversely impacted based on the additional weight of the roof. This change did not involve any electrical loadings. No unreviewed safety question was involved.

SE-95-149-DE

VALVE REPLACEMENT WITH BLIND FLANGES

Blind flanges of compatible material were used to replace valve UW-252 located in the City Water Meter House. The replacement will operate in the same manner of the valve since the valve is locked open and never operated. This replacement is non-electrical. No unreviewed safety question was involved.

SE-95-150-DE

REPLACEMENT OF CVCS VALVES

Replacement of the Chemical and Volume Control System (CVCS) Valves 283 & 284 with new Posi Seal valves provide improved performance and service life. Materials of both the original and new are stainless steel. The change has no impact, nor is it impacted by the plant's mode of operation. It does not involve the Containment nor impact any Class 1E equipment. The new valves are seismically qualified and are restrained in the same manner as the original valves. There is no change in the operability of the system. No unreviewed safety question was involved.

SE-95-151-DE

REPLACEMENT OF CAP SCREWS AND NUTS

This change replaces the Cap Screws and Nuts on PCV-548 which were manufactured to Specification A307 with Cap Screws and Nuts made of 316 stainless steel. The materials of the change are compatible with the original installation. This replacement is mechanical and does not impact electrical systems or loadings. No unreviewed safety questions was involved.

SE-95-152-DE

BLIND FLANGE REPLACEMENT

The replacement flange for the Fuel Transfer Tube blind flange will function identical to the original. Changing to a seal made from EPDM is acceptable. No new failure modes were introduced and no system design parameters are impacted by this change. This installation was mechanical, and no electrical load nor systems were impacted. Seismic capability was analyzed and acceptable. Man-rem will be reduced because the replacement closure flange is easier to install. No unreviewed safety question was involved.

SE-95-153-GM

ADD OR REPLACE DIODES IN RELAY CIRCUITS

This generic Modification initiates the replacement or addition of diodes (Class "A" and seismically mounted or non Class A) across the relay coils reduce spikes in the relay and therefore improve the relay life and the reliability of the protection circuitry. They have leads at each end that are compatible with the rest of the wiring circuit and were installed inside panel and cabinets in non-harsh areas on terminal blocks or directly across the relay coils. The function of the relays where the diodes were added is to energize or de-energize the circuit. The diode has two failure modes: open circuit or short circuit. An open circuit diode will not affect the function of the circuit. A short circuited diode may result in de-energizing the circuit through operation of the fuse or breaker. The new diodes do not add any new failure modes nor increase the probability of equipment malfunction previously evaluated. No unreviewed safety question was involved.

SE-95-155-TM

SUPPLY ALTERNATE DC FEED TO THE OVERPRESSURIZATION SYSTEM ARMED LIGHT

This jumper supplied an alternate DC feed to the indicating lights of the Overpressurization System (OPS) while the Turbine Control valves were tagged out. The jumper was necessitated by a tag out which removed the normal power supply from the lights. It will only be installed at Cold Shutdown as required for the Full System Decontamination and will not change or affect any electrical system or electrical load. No cabling is being added, changed or rerouted. No unreviewed safety question was involved.

SE-95-157-DE

VALVE REPLACEMENT

The replacement of Auxiliary Boiler Feedwater Pump bearing cooling pressure control valve, PCV-1213, performs the same pressure control as the original. It has anti-cavitation trim which is suitable for this high pressure drop application and fails open on loss of instrument air. The valve is a mechanical component with no electrical interface of any kind. It was seismically installed in the same location as the original with new pipe supports and will have no negative effect during a seismic event. No unreviewed safety question was involved.

SE-95-158-DE

SAFETY STANCHION ANCHORAGE REPLACEMENT

Replacement of the original Reactor Cavity Perimeter Safety Stanchion Anchors with Hilti inserts and bolts reestablished the Stanchion Anchor system to the original design requirements including seismic criteria. The new anchors were compatible with the original and did not adversely affect the structural capability of the concrete floor (VC elev. 95'). No unreviewed safety question was involved.

SE-95-160-TM

NITROGEN BACKUP SUPPLY TO PRIMARY AUXILIARY BUILDING SERVICES

A high pressure hose was installed from the Nitrogen Truck to Valve RA-2. The hose was secured to prevent interference with other equipment in the unlikely event of a rupture. This jumper hose was only applied at Cold Shutdown when the safety related equipment using Nitrogen was not required. This temporary change did not affect the Nitrogen Systems function or the systems served by the Nitrogen System. No unreviewed safety question was involved.

SE-95-161-DE

SAFETY INJECTION PUMP SHAFT SLEEVE O-RINGS REPLACEMENT

The shaft sleeve O-Rings of the Safety Injection Pumps were replaced. The replacement O-Rings are split ball and socket type replacing square one piece asbestos containing packing rings. Three O-Rings were installed between the shaft and shaft sleeve and are fitted between a sleeve shoulder and a ring adapter. The new O-Rings introduced a

different leakage path because of the split feature, however this was mitigated by the use of three O-Rings and staggering their joints. The replacements provide the same function as the existing ones. No unreviewed safety question was involved.

SE-95-162-TM

MAIN TURBINE SEAL OIL TANK HOSE TO DIRTY OIL STORAGE TANK (DOST)

A temporary hose was installed that provided drainage for the Turbine Seal Oil Tank to the DOST while the Turbine Generator was shut down for maintenance. The hose was manned during the draining procedure to mitigate any potential oil spill from a ruptured hose. System operability was not affected since the Turbine Seal Oil System was shutdown. No unreviewed safety question was involved.

SE-95-163-TM

INSTRUMENT AIR CROSS CONNECT TO STATION AIR INSIDE THE CONTAINMENT

A temporary hose was installed to provide Station Air to the Instrument Air Header inside the Containment during PT-R13 and B&C Valve testing. It was only used during Cold Shutdown. The valves and instruments connected to the Instrument Air System received identical quality air during the time this temporary hose jumper was in use and are not required to be operable during Cold Shutdown. A failure of the hose would result in all the air operated valves going to their Fail-Safe position. No unreviewed safety question was involved.

SE-95-164-TM

NITROGEN SUPPLY TO THE REACTOR COOLANT SYSTEM (RCS)

A temporary jumper was installed to provide a regulated additional supply of Nitrogen to allow pressurization of the RCS. A check valve, 1808, and a relief valve, RV-1816, mitigate the failure mode of this jumper. This change did not affect the operability of the system. The hose did not challenge the seismic qualifications or structural integrity of the system. No unreviewed safety question was involved.

SE-95-165-TM

NITROGEN SUPPLY TO THE VOLUME CONTROL TANK

A temporary nitrogen supply was installed to provide a supply to the Volume Control Tank. It was only used during Cold Shutdown. Existing isolation and protection devices for the normal system were utilized. The temporary supply provided identical service as the normal Nitrogen supply to the Volume Control Tank. No unreviewed safety question was involved.

SE-95-166-DE

CHEMICAL FEED PIPING REPLACEMENT

The Chemical Feed Piping to the 22 Steam Generator Feedwater line was replaced. The weight of the new piping was about 2% greater than the old piping, however the existing

supports are adequate. The piping is non-seismic and has already been analyzed for a high energy line break. No unreviewed safety question was involved.

SE-95-167-DE

SAFETY INJECTION PUMPS SEAL FLUSH PIPING FLEXIBLE METAL HOSE

A stainless steel flexible hose was installed in the Safety Injection Pumps Seal Flush piping. This hose is similar to the original design, piping and material are compatible. This was a seismic installation and reduced the seismic load on the pumps. There was no change to the Seal Flush System's function and no impact on the operability of the Safety Injection pumps. No unreviewed safety question was involved.

SE-95-168-TR

VALVE FP-44 TEMPORARY REPAIR

Bonding material and a strongback were added to reduce the stress on the valve to ensure City Water was maintained within the pressure boundary. This was a backup supply to the Fire System, however it did not impact the operability of the Fire Protection System. A failure would result in the flooding of the Utility Tunnel which does not contain any safety related equipment. No unreviewed safety question was involved.

SE-95-170-DE

CONTAINMENT RECIRCULATION PUMP MOTOR COOLER REPLACEMENT

The Containment Recirculation Pump Motor Cooler was replaced with a comparable unit. This was a direct replacement in a closed system and upgrades the heat removal capability. It did not affect the operability of the Containment Recirculation Pump Motor. There was no change in the seismic impact of the system. No unreviewed safety question was involved.

SE-95-171-TM, Rev. 1

SAFETY INJECTION RESET INDICATION LIGHT

A 10K ohm resistor was installed. The Safety Injection Train A Reset Block neon light was illuminated by electromagnetic induction and not from actual operation. The normal functioning for the light was restored by this change. The change did not affect the operation of any safety related equipment. No unreviewed safety question was involved.

SE-95-172-DE

VALVE 523 ACTUATOR REPLACEMENT

The actuator for Valve 523 was replaced. The materials of the replacement are compatible with the existing actuator. The new actuator retained all its required functions. No unreviewed safety question was involved.

SE-95-175-DE and SE-95-176-DE

VALVES MW-550 AND MW-549 REPLACEMENT

Valves MW-550 and MW-549 were replaced. The new valves are equivalent and operate in the same manner as the original and the material was compatible with the existing installation. No systems were affected by the replacement valve. No unreviewed safety question was involved.

SE-95-177-DE

DRAINS COLLECTION TANK LEVEL CONTROLLER REPLACEMENT

Drains Collection Tank Level Controller LC-1144 was replaced with an equivalent controller. The new level controller operates in the same manner as the original and the material was compatible with the existing installation. No systems were affected by the replacement of the controller. No unreviewed safety question was involved.

SE-95-178-SP

CHEMICAL AND VOLUME CONTROL SYSTEM(CVCS)

Each charging pump has a forced lubrication system, with a pressure switch that trips the pump on low oil pressure. A time delay relay allows the pump to start and run until the oil pressure builds up. The time delay relay setting was changed from 15 to 30 seconds. This allowed the pump's lube oil pressure to sufficiently clear the reset pressure and the fluid drive repriming (dead band) time on starting. The change improved the starting reliability of these pumps. This change did not impact the automatic start or any required function of the CVCS Charging Pumps. No unreviewed safety question was involved.

SE-95-179-DE

SWT VALVE REPLACEMENTS

Replacement valves were installed for SWT-681 and SWT-682 to the Main Turbine Lube Oil Coolers. The new valves are equivalent and operate in the same manner as the original and the material was compatible with the existing installation. No systems were affected by the replacement valves. No unreviewed safety question was involved.

SE-95-180-DE, Rev. 1

RIVER WATER PUMPS SEAL REPLACEMENT

The seals were replaced on River Water Pumps 11 and 12. The new seals operate in the same manner as the old seals. The materials were the same or compatible for the pumps. No safety related equipment was affected. No unreviewed safety question was involved.

SE-95-181-DE

RIVER WATER TEMPERATURE SENSOR REPLACEMENT

The Resistance Temperature Detectors (RTDs) measuring the condenser inlet and outlet temperatures were replaced. This was a like and kind replacement. The materials were suitable for river water applications. No safety related equipment was affected. No unreviewed safety question was involved.

SE-95-182-TM

CITY WATER TO TRAILERS

City Water was provided to the trailers for the 1995 Refueling Outage by temporary hose connections. A manual stop valve was provided at the Quick disconnect to the City Water System to mitigate a hose failure. No safety related equipment was affected. No unreviewed safety question was involved.

SE-95-183-TM

HCV CONTROLLER SWAP

The controller for HCV-123 was installed as a temporary replacement for HCV-133's controller that was malfunctioning. The controllers are identical for both valves. The temporary jumper that accomplished this swap was only applied at Cold Shutdown. HCV-123 was not required operable in Cold Shutdown. There was no change to any safety function or operability of any system. No unreviewed safety question was involved.

SE-95-184-TM

REFUELING CANAL TEMPORARY DRAIN LINE

A temporary alternate path was provided to drain the Lower Refueling cavity to the Containment Sump. This path was only used in Cold Shutdown. Further, this temporary change required that there was no fuel in the Core and that the Spent Fuel Pool was separated from the Refueling Canal. Valves and hose were seismically restrained. The temporary spool piece and isolation valve manifold were seismically supported and restrained. An operator was in full time attendance to mitigate any failure modes. No unreviewed safety question was involved.

SE-95-186-TM

SEAL INJECTION FILTER DIFFERENTIAL PRESSURE ALTERNATE INDICATION

Temporary pressure transducers were installed that provided an alternate remote indication of Seal Injection Filter differential pressure in a low dose area. The normal function of the Seal Injection Filter Differential Pressure Instrument Block was not required in Cold Shutdown and RCS full system decontamination modes of operation. The temporary transducers did not affect the seismic function of any other equipment. The function of the Seal Injection Filters was not changed. No unreviewed safety question was involved.

SE-95-187-TM

CLEAR THE R-1 TO R-8 HIGH RADIATION ALARM

A temporary jumper was installed to clear the R-1 to R-8 area monitors High Radiation alarm. Due to a high radiation field during RCS full system decontamination, the R-8 Radiation Monitor was required to be out of service before this jumper was installed. The out of service condition of R-8 masked the other radiation monitors alarms. The jumper restored the alarm function for the other monitors. No unreviewed safety question was involved.

SE-95-188-TM

PROVIDE ALTERNATE MAKEUP PATH TO REFUELING CAVITY

A temporary hose was connected to allow the Primary Water System to provide makeup through Containment Spray piping to the refueling cavity during cold shutdown. A check valve was also installed, to prevent backflow. The Chemical and Volume Control System, which normally provides makeup, was out of service. Neither that system nor the Containment Spray System is required during cold shutdown. This connection allowed makeup to be supplied to the Refueling Cavity in the event it lost inventory. No unreviewed safety question was involved.

SE-95-189-TM

VACUUM DEAERATOR TANK INPUT VALVE

Level Control Valve, LCV-1 was held in the Open position by a temporary electrical jumper during the 1995 Refueling Outage. This change allowed demineralized water to be supplied to Unit No.2's systems not requiring de-oxygenated water while the Vacuum Pumps were out of service. No system design changes were caused by this temporary change. No unreviewed safety question was involved.

SE-95-190-TM

PRESSURIZER LOW LEVEL ALARM

A temporary Low Pressurizer Level alarm was installed for operator use in the Cold Shutdown mode with all the fuel removed from the Core. Pressurizer Level Transmitters 459 and 460 were isolated during RCS full system decontamination which caused a constant alarm in the Control Room. This temporary change cleared the constant alarm and provided Pressurizer Level Transmitter 461 Low Level alarm capability. The changes were removed after the completion of RCS full system decontamination. No unreviewed safety question was involved.

SE-95-191-DE

FAN COOLER MOTOR TEMPERATURE INDICATOR REPLACEMENTS

The Temperature Indicator for Service Water from the Fan Cooler Motor Cooler was replaced. The new temperature indicators were the same form, fit and function as the original ones and met the design requirements of the Service Water System. There was no effect on the operability of the system. No unreviewed safety question was involved.

SE-95-192-DE

PORV BLOCK VALVES DISC REPLACEMENT

The wedges in PORV Block Valves 535 and 536 were replaced. The new materials were compatible with the existing installation. This change did not affect the operability of any system and maintained the seismic capability of the system. No unreviewed safety question was involved.

SE-95-193-DE

MAIN STEAM VALVE REPLACEMENT

Main Steam Trap MST-37 drain valve 108-110 was replaced. The materials of the new valve met design specifications. The replacement valve operates in the same manner as the original one. No operational impacts were caused by this valve replacement. This valve did not interact with any safety-related system or equipment. No unreviewed safety question was involved.

SE-95-194-DE

EXTRACTION VALVE REPLACEMENT

Extraction Valve 6EX-29-4 was replaced. The materials of the new valve met original design specifications. The replacement valve operates in the same manner as the original one. No operational impacts were caused by this valve replacement. This valve did not interact with any safety-related system or equipment. No unreviewed safety question was involved.

SE-95-195-SP

MAIN TURBINE RUNBACK ON ROD DROP

Set points were changed on the time delay relays for the Main Turbine Runback caused by a rod drop signal. The time delay relays are a backup to the Turbine control oil pressure to terminate the Turbine Runback. The set point was selected to prevent any challenges to the Primary System and to prevent unit trips. A rod drop event has been analyzed with and without Turbine Runback and the Plant response is acceptable. No unreviewed safety question was involved.

SE-95-196-EV

LOOSE PART/FOREIGN OBJECT EVALUATION

This evaluation was to assess the acceptability of operating Unit No.2 with a postulated loose part in the Primary side of the Reactor Pressure Vessel. A signal from the Digital Metal Impact Monitoring System indicated a loose part weighing approximately two ounces in the lower plenum area of the Reactor Pressure Vessel. This evaluation was based on the guidance of NSAC-125 and 10CFR50.59(a)(2). It was concluded that plant components and safety systems are not adversely affected during normal operation and accident conditions by the presence of the loose part evaluated. No unreviewed safety question was involved.

SE-95-197-DE

MAIN STEAM VALVE REPLACEMENT

Check Valve 101-12 for Main Steam Trap 10. The materials of the new valve met original design specifications. The replacement valve operates in the same manner as the original ones. No operational impacts were caused by this valve replacement. This valve did not interact with any safety-related system or equipment. No unreviewed safety question was involved.

SE-95-199-DE

REPLACE PRESSURE TRANSMITTERS POWER SUPPLY

Obsolete power supplies for Pressure Transmitters (PT-3101, PT-3102, PT-3103 and PT-3104) were replaced. The new replacement power supplies were compatible and did not create a new failure mode or impact an accident mitigating capability of any equipment. This modification did not affect any electrical system capacity or load. There was virtually no weight change as a result of this modification. No unreviewed safety question was involved

SE-95-200-MD

ASBESTOS DECONTAMINATION FACILITY

A permanent asbestos decontamination facility was constructed in the Unit No. 1 Turbine Building Condenser Pit and the temporary structure under Jumper 92-062 was eliminated. There were no changes to any safety related system. No unreviewed safety question was involved.

SE-95-201-EV

RADIATION MONITOR R-8 EVALUATION

This was an evaluation for the removal of area radiation monitor R-8 from active service. The Full System Decontamination (FSD) equipment that was installed in the area near R-8 was removed. The functions involving high radiation fields conducted in this area before the installation of the decontamination equipment are no longer done nor will there be any future high radiation fields. Therefore, removal of Radiation Monitoring R-8 was acceptable. No unreviewed safety question was involved.

SE-95-202-MM, Rev. 2

FUEL STORAGE BUILDING ROOF REPLACEMENT

The roofing system for the Fuel Storage Building (FSB) was replaced. The new roofing system is UL rated Class A and therefore is considered non-combustible. Debris protection was installed over the pool to ensure that no construction material entered it. Existing load movement restrictions were met for the FSB. The debris protection tarp could be removed from the pool in time to prevent the pool water from boiling, if it inadvertently entered the pool. This change did not affect any safety related equipment. No unreviewed safety question was involved.

SE-95-203-MM

INDIAN POINT UNIT 1 SUPERHEATER BUILDING ROOF REPLACEMENT

A portion of the Superheater Building roof was replaced. The new roofing system is UL rated Class A and therefore is considered non-combustible. This change did not affect any safety related equipment. No unreviewed safety question was involved.

SE-95-204-PR, Rev. 1

LOSS OF SUBCOOLING MARGIN MONITOR

This procedure provides direction on removing thermocouples from scan while maintaining the Subcooling Margin Monitor operable. This change limits the number of thermocouples that can be removed from scanning and requires a Jumper and Safety Evaluation for each. The Subcooling Margin Monitor remains operable thereby providing the amount of subcooling that exists in the Reactor Coolant System. No unreviewed safety question was involved.

SE-95-206-PR

FREEZE SEAL USE

A drain valve was installed in the Service Water Strainer 22 Blowdown piping utilizing the station's stainless steel freeze seal procedure. The use of the freeze plug maintained the integrity of the Service Water System and it remained operational. The freeze seal equipment was attached to seismic safety related piping, however Service Water Pump 22 was out of service and therefore no safety related equipment was affected. No unreviewed safety question was involved.

SE-95-209-DE

TRAP REPLACEMENT

Unit Heater Trap UHT-511 was replaced with an equivalent trap. This replacement did not affect any safety related equipment. No unreviewed safety question was involved.

SE-95-210-EV

LOOSE PART/FOREIGN OBJECT EVALUATION

This evaluation was to assess the acceptability of operating Unit No.2 with the identified inventory of non-retrievable foreign objects in the Secondary side of the Steam Generators. Each identified foreign object was assessed for its potential tube wear. Visual inspections near where the objects were located did not indicate any tube wear. Wear time calculations and physical impact of the limiting objects for the ensuing fuel cycle were satisfactory. The evaluation concluded that the identified foreign objects will not adversely affect the Steam Generators tube structural or leakage integrity, plant systems, instrument lines or plant operation during all normal or accident conditions. No unreviewed safety question was involved.

SE-95-212-TM

REFUELING WATER STORAGE TANK DRAIN

A temporary hose was installed to complete the draining of the Refueling Water Storage Tank for maintenance. The plant was limited to Cold Shutdown with the hose installed. The hose was restrained and did not interfere with any other equipment. No safety related function was affected by this temporary modification. No unreviewed safety question was involved.

SE-95-213-TM

MAIN TURBINE OIL FLUSH

Temporary piping was installed that provided Auxiliary Steam to the heaters for the Main Turbine Oil Reservoir during the oil flush. The Turbine-Generator was out of service while this temporary piping was used. No safety related function was affected by this temporary modification. No unreviewed safety question was involved.

SE-95-215-TM

REFUELING CANAL TEMPORARY DRAIN LINE

While the plant was in Cold Shutdown a temporary alternate path was provided to drain the Lower Refueling cavity to the Containment Sump. This temporary change further required the Spent Fuel Pool to be separated from the Refueling Canal. Valves and hose were seismically restrained. The temporary spool piece and isolation valve manifold were seismically supported and restrained. An operator was in full time attendance to mitigate any failure modes. No unreviewed safety question was involved.

SE-95-217-TM

MAIN TURBINE BEARING NO.1

A temporary plug was installed in the No.1 Bearing Lift Oil line. This facilitated Bearing Lift oil flow to the other bearing while the HP Turbine was disassembled. No safety related function was affected by this temporary modification. No unreviewed safety question was involved.

SE-95-218-TM

HYDROGEN COOLER

Three temporary hoses were installed to restore normal outlet flow to the 21 North Hydrogen Cooler. No safety related function was affected by this temporary modification. No unreviewed safety question was involved.

SE-95-220-DE

CONTAINMENT WALL REPAIR

The non-structural delamination/cracks in the Containment wall in the Electrical Penetration Area were repaired. The epoxy grout is specifically designed for pressure grouting into Portland Cement based concrete. No safety related function was affected by this repair. No unreviewed safety question was involved.

SE-95-222-MM, Rev.1

INTERIM FILTER SYSTEM DUCT REMOVAL

The Interim Filter System ductwork and its supports were removed from the roofs of the Fuel Storage Building and the Fan House. Guidance of NRC Bulletin 96-02 to mitigate the potential for adverse impacts from the removal of this system were followed. No other safety equipment was affected by this change. No unreviewed safety question was involved.

SE-95-223-MM

ETHANOLAMINE (ETA) CHEMICAL ADDITION

The existing Hydrazine System was modified to permit the addition of Ethanolamine to Secondary plant systems. The use of ETA was evaluated in SE-95-256-EV and did not affect the operability of any system. No safety related equipment was affected by this change. No unreviewed safety question was involved.

SE-95-224-DE

UH-69 VALVE REPLACEMENT

Valve UH-69 was replaced. The materials of the new valve met design specifications. The replacement valve operates in the same manner as the original one. No operational impacts were caused by this valve replacement. This valve did not interact with any safety-related system or equipment. No unreviewed safety question was involved.

SE-95-225-DE

COMPONENT COOLING WATER PUMPS MODIFICATION

The pump's shaft sleeve and nut for pumps 21, 22 and 23 were modified to use with the new seals. This change did not affect any safety related function and was determined to be equivalent to the original pump. No unreviewed safety question was involved.

SE-95-226-PR

EMERGENCY OPERATING PROCEDURE

Revision 21 corrected deficiencies in the immediate action step numbers caused by a previous software program change and typographical errors. The basic function of the procedures was not altered by this change. No unreviewed safety question was involved.

SE-95-227-TM

UNIT 1 CHEMICAL SYSTEMS BUILDING SUMP TANK DESLUDGE

A previous modification had installed new sump tank pumps equipped with strainers. The purpose of the temporary modification was to flush and clean the system prior to hydrostatic testing with the new pumps and strainers; the flushing and cleaning were required by the procedures used in the previous modification. A temporary connection was made between the suction strainer of sump pump #18 and a sandpiper pump, the output was directed to the sump pump discharge. This mechanical jumper permitted flushing and cleaning the sump tank. The most likely failure mode was a failure of the hose used for the jumper, and this was compensated by the continuous presence of personnel during the time the jumper was in use. The equipment and system affected by this temporary modification do not perform a mitigating function during any accidents analyzed in the Unit 1 or Unit 2 safety analysis report. No unreviewed safety question was involved.

SE-95-228-DE

REPLACE VALVE IN WASTE DISPOSAL SYSTEM (WDS)

Check valve 1761 was replaced with an upgraded valve. The new valve was seismically restrained and meets all ratings specified for the WDS, operates in the same manner as the old, and was mounted in accordance with the original design. No documents that are part of the licensing basis were affected. No unreviewed safety question was involved.

SE-95-229-TM

TEMPORARY PRIMARY AUXILIARY BUILDING SUMP PUMP

Electrical bus maintenance required that both PAB sump pumps be temporarily deenergized. A temporary air-driven pump was installed to prevent the sump from overflowing. The air-driven pump was manually started, and an operator was in attendance when it was in operation. This would have permitted the immediate response to any failure of the air supply to the pump or the discharge hose from the pump. The sump pumps provide no safety-related functions. No unreviewed safety question was involved.

SE-95-231-TM

INSTALL TEMPORARY DRAIN VALVE FOR NON-ESSENTIAL SERVICE WATER

A 1/2 inch drain valve was temporarily installed on the non-essential service water header that supplies various conventional plant services. It replaced a 2 inch drain valve. The normal function of the valve was restored. The valve is not safety related and does not affect the safety related functions of the Service Water System. No unreviewed safety question was involved.

SE-95-232-TM

TEMPORARY FEED FOR PRIMARY AUXILIARY BUILDING FLOOD ALARM PANEL

Electrical bus maintenance required that the normal power supply to the PAB flood alarm panel be disconnected. The normal 20-amp supply was replaced temporarily by a supply from a 3-prong outlet. The fuse in the alarm cabinet remained as in-line protection, and electrical separation was maintained. The change did not interface with any safety-related systems, and it provided an alarm function only. The temporary power supply did not change electrical system capacity, output, or voltage. No unreviewed safety question was involved.

SE-95-233-TM

SUPPLY AIR PRESSURE TO TURBINE THRUST BEARING DURING OIL FLUSH

When the plant was in cold shutdown and the turbine generator was tagged out, station air was supplied to the turbine thrust bearing. The air pressure was supplied during oil flush, to prevent oil from leaking out. The air hose used was compatible with the existing installation, was not located in an area that contains safety-related equipment, and was protected from external events. No unreviewed safety question was involved.

SE-95-234-TM

TEMPORARY NITROGEN SUPPLY TO LEVEL INDICATOR FOR 21 BORIC ACID STORAGE TANK

A temporary nitrogen bottle was provided to maintain normal operation of the bubbler which provides Control Room measurement of level in the 21 Boric Acid Storage Tank. The Nuclear Nitrogen System was undergoing maintenance with the plant in the cold shutdown mode. No safety related equipment was impacted and no unreviewed safety question was involved.

SE-95-235-TM

BORIC ACID STORAGE TANK TEMPERATURE CONTROLLER POWER SUPPLY

To complete a previous modification, the feed to the temperature controller for BAST 21 had to be disconnected. Since the feed to BAST 22 is connected to the same feed, BAST 22 would have lost its control power. A jumper was used to energize the BAST 22 temperature controller power supply from a spare 20-amp circuit whose breaker would have protected the electrical distribution system from faults attributable to the jumper. The maximum current draw for the controller was 1 amp; the jumper wire was not passed through or across any cable trays and was kept at least 1 inch from any conduits, so electrical separation and tray loading were maintained. No unreviewed safety question was involved.

SE-95-237-TM and SE-95-238-TM

NITROGEN SUPPLY TO AIR OPERATED VALVE

Condensate storage tank outlet valve 1158, an air operated valve, normally supplies water for conventional plant usage. The air system to the valve was tagged out for maintenance during a period of cold shutdown, so a temporary nitrogen source was supplied to operate valve 1158. The nitrogen source was a bottle with a regulator set to the normal air pressure for valve 1158, so valve function remained normal. Tubing and fittings compatible with the existing installation were used. A loss of the temporary nitrogen supply would have caused the valve to fail in its fail-safe, closed position. No unreviewed safety question was involved.

SE-95-239-TM

STROKING OF PRESSURE CONTROL VALVE BY TEMPORARY NITROGEN SUPPLY FOR TEST

The normal air supply and backup nitrogen supply to PCV-1139 (which supplies steam to auxiliary boiler feed pump 22) were tagged out, so a temporary nitrogen supply was provided to allow stroking the valve for a test. The only failure mode associated with this temporary modification was the loss of nitrogen to the valve, causing a failure to stroke. This was satisfactory, because the PCV-1139 is not required to be operable at cold shutdown, which was the only plant condition under which the temporary modification was allowed. There were no margin of safety issues. No unreviewed safety question was involved.

SE-95-240-TM

NITROGEN SUPPLY TO SERVICE WATER PRESSURE TRANSMITTERS

When either service water header is in operation, indication of its pressure is required. The pressure transmitters use instrument air for their pneumatic transducers, so when the instrument air supply header is tagged out for maintenance a temporary gas source is needed. A nitrogen bottle with a regulator and a relief valve on the outlet side was used to provide a gas source to pressure transducers 1190 and 1191. The modification had no direct interface with the service water system, in that it only provided indication in the central control room. A loss of indication would have been detected immediately and investigated, and a failure would have had no deleterious effects on service water system operability. No unreviewed safety question was involved.

SE-95-244-TM

TEMPORARY SUPPLY TO SEAL OIL TANK

With the seal oil system out of service during a refueling outage, the seal oil tank was supplied with oil. To accomplish this, a hose was connected from the Clean Oil Storage Tank to the seal oil tank. All materials involved in this temporary modification were compatible with the carbon steel of the seal oil system, no instruments or controls were impacted by the modification, and the equipment is not required to be functional during a seismic event. The hoses were sleeved to minimize the possibility of a spill, and the lines were manned continuously during the duration of the fill. No unreviewed safety question was involved.

SE-95-246-TM

INSTALL ISOLATION VALVES FOR LEVEL TRANSMITTER

Level instruments provide indication of the Reactor Coolant System level during cold-shutdown, draindown operations. Isolation valves were installed at the high and low sides of LIC-3100S so this device could be isolated during vacuum refill without taking LIT-3100 out of service. The stainless steel components of this modification are compatible with existing equipment, and although there is an increase in the number of mechanical fittings in the system, the possibility for leakage is not greater than that which existed before the modification was implemented. No unreviewed safety question was involved.

SE-95-247-TM

COOLING WATER FOR INDUCTION HEATING MACHINE

Fire protection hose reel 29 was used to temporarily supply cooling water to an induction heating machine. Hoses and fittings used for this temporary modification were compatible with the existing hose reel, and the small amount of water used (20 gpm) did not impact the fire protection system's operability or its capacity. If the hose had leaked, the amount of leakage would not have challenged the high pressure fire water system capacity, and personnel were in attendance to isolate the flow if necessary. The Fire

Protection Program Plan and Appendix R compliance were not affected because the flow was so small. No unreviewed safety question was involved.

SE-95-248-TM

MONITORING AND DATA COLLECTION ON LARGE MOTOR STARTS ON 480-V BUS

Leads were connected to terminal points 3 and 4 and run to a seismically secured recorder. The purpose of the recorder was to monitor and collect data to determine the effects on rod position indicator alarms of large motor starts on bus 2A. Fuses were installed between the recorder and its connecting terminal points to ensure that a malfunction in the recorder would not affect normal circuit function. All connections made for this temporary modification utilized materials compatible with the existing installation. No unreviewed safety question was involved.

SE-95-250-DE

REPLACE VALVE IN FIRE PROTECTION SYSTEM

Valve FP-660 was replaced with an essentially identical valve. The replacement valve meets or exceeds system design parameters, its materials are identical to those of the original valve, and it is essentially the same weight as the original valve. The valve does not impact the electrical system. No unreviewed safety question was involved.

SE-95-251-DE

REPLACE STATION AIR VALVE

Valve SA-981 was replaced with a like-and-kind valve. Operation of the new valve is the same as the original valve, so system operability is not affected. Electrical systems are not involved. No unreviewed safety question was involved.

SE-95-253-EV

USE OF FREEZE SEAL ON SERVICE WATER PIPE

A freeze seal was used on a 2.5" carbon steel pipe that supplies service water to the B phase isophase bus duct coolers. The purpose of the seal was to permit inspection and possible repair or replacement of a valve that was believed to be obstructed and to be preventing sufficient flow to the coolers. The work was performed using the station's Carbon Steel Freeze procedure. The only new failure mode identified was the potential loss of the freeze plug due to its incomplete formation or the loss of nitrogen supply. The loss of freeze plug was precluded by procedural requirements and ensuring that an adequate nitrogen supply at the job site to establish and maintain the seal for the job duration plus margin. Equipment near the job location was adequately protected from potential liquid nitrogen spillage, which could have resulted in thermal shock situations. No unreviewed safety question was involved.

SE-95-254-TR

REPAIR TO MOISTURE SEPARATOR REHEATER DRAIN TANK VENT LINE

A temporary repair was made to the MSR 22B drain tank vent line using Leak Repair. The repair did not affect how the line normally operated, the plant's mode of operation was not affected, there was no new possibility of a high-energy line break, and no system parameters were changed or affected. The temporary repair clamp was supported by the existing MSR and its existing supports with no adverse effect, and the materials of the repair were compatible with the existing installation. No unreviewed safety question was involved.

SE-95-255-TR

REPAIR TO MOISTURE SEPARATOR REHEATER DRAIN TANK DRAIN LINE

A temporary repair was made to the MSR 22A drain tank drain line using Leak Repair. The repair did not affect how the line normally operated, the plant's mode of operation was not affected, there was no new possibility of a high-energy line break, and no system parameters were changed or affected. The temporary repair clamp was supported by the existing MSR and its existing supports with no adverse effect, and the materials of the repair were compatible with the existing installation. No unreviewed safety question was involved.

SE-95-257-DE

REPLACE SURGE ARRESTORS ON EMERGENCY DIESEL GENERATORS

The surge arrestors on EDGs 21, 22, and 23 were replaced. The replacement does not introduce any new failure modes, the newer model surge arrestor functions in the same manner as the original and its ratings exceed those specified for the system, and no load changes are involved. Mounting of the replacement arrestors is the same as the mounting of the originals. No unreviewed safety question was involved.

SE-95-258-DE

REPLACEMENT OF VALVE 3EX-38-9

The replacement of the valve with a new valve was evaluated. The materials of the new valve meet design specifications, there is no operating impact by the change, and the plant's mode of operation is not changed. There is no electrical impact, because the valves are non-electrical. The valve is in a high energy system, but the replacement does not create a new high energy line break that has not been analyzed previously. No unreviewed safety question was involved.

SE-95-259-TR

REPAIR TO MAIN STEAM TRAP DOWNSTREAM LINE

A temporary repair was made to the MST-48 outlet line downstream of valve MS-99-221 using Leak Repair. The plant's mode of operation was not affected, there was no new possibility of a high-energy line break, and no system parameters were changed or affected. The temporary repair clamp was supported by the existing supports with no

adverse effect, and the materials of the repair were compatible with the existing installation. No unreviewed safety question was involved.

SE-95-261-TR and SE-95-263-TR

TEMPORARY MAIN STEAM TRAP (MST) LINE REPAIR

The line downstream of MS-99-233(Outlet Stop Valve for Trap MST-49), was temporarily repaired using compatible materials. The temporary repair operated in the same manner as the original and did not affect or change any system parameters. The MST line is considered high energy. However, the temporary repair did not create a new high energy line break. No unreviewed safety question was involved.

SE-95-262-TR

TEMPORARY REPAIR TO OPERATING VENT LINE

The 26C Feedwater Heater (FWH) operating vent line was temporarily repaired using compatible materials. The temporary repair operated in the same manner as the original and did not affect or change any system parameters. The 26C FWH operating vent line is considered high energy. However, the temporary repair did not create a new high energy line break. No unreviewed safety question was involved.

SE-95-264-TR

TEMPORARY REPAIR TO THE CROSSUNDER TO 23A MSR

The Crossunder to 23A Moisture Separator Reheater (MSR) was temporarily repaired using materials compatible with the original installation. The temporary repair operated in the same manner as the original and did not affect or change any system parameters. The Crossunder is considered high energy and is part of the erosion/corrosion inspection program. However, the temporary repair did not create a new high energy line break. Additional supports were installed as part of the temporary repair to adequately support the repair clamp. The system design support requirements were not challenged. No unreviewed safety question was involved.

SE-95-265-TR, SE-95-266-TR, and SE-95-267-TR

TEMPORARY REPAIR TO THE CROSSUNDER TO 23A MSR

The Crossunder to 23A Moisture Separator Reheater (MSR)(Pinhole leak on the West side of the 46.5" to 26.5" Tee vicinity) was temporarily repaired by welding. Materials were compatible with the original installation. The temporary repair operated in the same manner as the original and did not affect or change any system parameters. The Crossunder is considered high energy and is part of the erosion/corrosion inspection program. However, the temporary repair did not create a new high energy line break. No unreviewed safety question was involved.

SE-95-268-TM

FILL FEEDWATER HEATER WITH WATER FROM THE CONDENSATE STORAGE TANK

The shell side of feedwater heater 21C was filled with water from the Condensate Storage Tank (CST). The fill was made for the purpose of identifying suspected tube leaks and was accomplished by installing a hose from CST drain stop to the feedwater heater drain stop. Approximately 200 to 300 gallons of water were used, less than one percent of the CST capacity, so the safety related function of the CST was not affected. The filling process was coordinated and observed by an operator, and had the hose leaked or broken the drain stop would have been isolated to prevent a reduction in the CST capacity. All equipment involved in this temporary modification was of material compatible with the existing systems. No unreviewed safety question was involved.

SE-95-269-DE

REPLACEMENT OF THREADED HOLES

Threaded holes for 23 Service Water Pump Packing Gland were replaced with Helicoils. The new threaded holes operate in the same manner as the original with no new failure modes introduced. The materials of the new threaded holes and the helicoil were compatible with the original installation and design. The change to the packing gland threaded hole, which was restored to its original dimensions, did not impact the Service Water Bay. The threaded hole replacement did not impact ISI/IST or have any environmental impact. No unreviewed safety question was involved.

SE-95-270-DE

SOLENOID VALVE REPLACEMENT

The Main Generator Hydrogen Purity Meter Vent Stop, G-97 Solenoid Valve, located in the Turbine Generator Building, was replaced. Materials of the new valve were compatible with the original. It operated in the same manner as the original and did not affect the plant's mode of operation. Neither electrical systems nor loads were altered. The valve was non-seismic, located in a non-seismic area and did not interact with any seismic equipment or system. It is not considered high energy and does not impact ISI/IST. The valve replacement was adequately supported by the existing installation. No unreviewed safety question was involved.

SE-95-272-DE

REPLACEMENT OF VALVE CASING MATERIAL

Casing material for Valve MW-647 was replaced with an alternate material which was compatible with system service, conditions and requirements. This assured continued operability under all design conditions with no new failure modes identified. The casing replacement, which was mechanical only, was located on 15' elevation of Unit 1 in the Water Treatment Plant filtration area. No safety related systems, structures or components are in this area. No unreviewed safety question was involved.

SE-95-273-MD

REMOVE RADIATION MONITOR, MONITORING PANEL AND RELIEF VALVES

This modification physically removed equipment that was no longer in use and had been retired (Radiation Monitor RE-36 and its appurtenances, Radiation Monitoring Panel 1N6B from the Radio-chemistry Laboratory, and Relief Valves PCV 1261, 1261-1, 1261-2, 1261-3 from Steam Generator Blowdown line). The above equipment did not have any impact on or interface with any previous accident analysis. This was a removal project that did not impact the plant design considerations or environmental considerations. No unreviewed safety question was involved.

SE-95-274-MM

INSTALL BREAKER REMOVAL PLATFORMS

The installation of removal platforms in front of circuit breaker cabinets on the Screenwell House roof provided a level non-skid surface for workers to safely remove and reinstall circuit breakers. This modification had no impact on operability of any system or equipment, and no new failure mode was introduced. It utilized epoxy grout and steel plate coated for exterior use. These materials were compatible with the existing roof construction. The modification took place outside of containment, and no electrical system or load was altered. The percentage of new dead weight loading (approximately 9%) was well within the structural capacity of the original building design. No unreviewed safety question was involved.

SE-95-275-MM

PROTEUS ALARMS FOR REFUELING WATER STORAGE (RWST) LEVEL & RESIDUAL HEAT REMOVAL (RHR) FLOW

This modification provided wiring from the PROTEUS plant process computer to Central Control Room annunciators to alert the operator on RWST Level, and alert the operator of loss of flow during refueling or plant shutdown. The level and loss of flow alarms are provided to enhance the operators awareness of RWST level and for loss of Residual Heat Removal flow events. No electrical systems or loads were altered. Existing cables with spare conductors were utilized for the modification. There were no changes to the plant configuration due to this modification. No unreviewed safety question was involved.

SE-95-276-TM

TEMPORARY REPLACEMENT OF BROKEN PRESSURE GAUGES

Gauges PI-5126B (on the dock) and PI-1346 (80' airlock) were found broken during a surveillance test. Exact replacements were not readily available, so the gauges were replaced temporarily with similar, but not like-in-kind, gauges. The temporary gauges, while not exactly the same as the original installation, provided the same indication, did not challenge the integrity of any system components or structures, and did not decrease the reliability of the systems. They did not represent a significant change to the system configurations, and are made of materials compatible, if not exactly the same, as the

original installation. Both valves were mounted to the same design standards as the original installation. Gauge PI-5126B (dock) has no seismic requirements, and gauge PI-1346 (80' airlock) was seismically mounted. No unreviewed safety questions was involved.

SE-95-277-TM

TEMPORARY REPLACEMENT OF BROKEN PRESSURE GAUGE

Gauge PI-1349 (95' airlock) was found to be broken. An exact replacement was not readily available, so the gauge was replaced temporarily with a similar, but not like-in-kind, gauge. The temporary gauge, while not exactly the same as the original installation, provided the same indication, did not challenge the integrity of any system components or structures, and did not decrease the reliability of the system. It did not represent a significant change to the system configurations, and was made of materials compatible, if not exactly the same, as the original installation. The valve was mounted to the same design standard as the original installation and was seismically mounted. No unreviewed safety questions was involved.

SE-95-278-TM

FEED UNIT 1 DURALINE FROM UNIT 1 DISTRIBUTION PANEL

This temporary modification used a Unit 1 distribution panel to feed a Unit 1 Duraline. The circuit used for the temporary connection was for unit heaters in Unit 1, but was not in use at the time. The temporary cable was properly sized for the application and there was no adverse interaction with the existing installation. The modification did not impact Class 1E equipment, the cabling was not run in any cable tray and did not interfere with any existing cabling, and no Unit 2 bus, vital or non-vital, was impacted. No unreviewed safety question was involved.

SE-95-279-TM

BYPASS RADIO FREQUENCY MONITOR POWER SWITCH

The RF monitor power switch was broken and a new switch was not immediately available, a temporary jumper was used to bypass the switch and provide power to the monitor. This change, which included inline fuses for protection against faults, made the monitor available at a time when its indication was crucial. The temporary modification did not alter the function of any system, and no new failure modes were introduced. No unreviewed safety question was involved.

SE-95-281-DE

REPLACE TURBINE HALL LIGHTING

Unit 1 Turbine Hall 53' elevation incandescent/mercury lights were replaced with High Pressure Sodium (HPS) lights. The new lights, which provide more lumens at less power consumption, utilized existing power supplies and mounting configuration. There were no new failure modes introduced by this change and no impact on systems or equipment. No unreviewed safety question was involved.

SE-95-282-TR

TEMPORARY REPAIR TO MAIN STEAM TRAP (MST) OUTLET WELD

The MST-126 trap outlet weld for FCV-1206 was temporarily repaired using compatible materials. The temporary repair of the trap outlet line allowed the trap to be operated in the same manner as the original and did not affect or change any system parameters. The MST line is considered high energy. However, the temporary repair did not create a new high energy line break. No unreviewed safety question was involved.

SE-95-283-TM

TURBINE STARTUP TEMPERATURE RECORDER REPROGRAMMING

Three faulty points were removed from scan on the turbine startup temperature recorder. The three points removed could still be monitored on the secondary plant temperature recorder. This temporary modification was achieved solely by reprogramming the recorder. Systems interactions, materials compatibility, and seismic integrity were not affected. No unreviewed safety question was involved.

SE-95-284-TM

TEMPORARY POWER SUPPLY FOR ANNUNCIATOR PANEL

The remote power supply for annunciator panel AS-1 faulted, causing the loss of all its alarm functions. Several of these alarm functions are required by the Technical Specifications. A temporary modification substituted a power supply for the failed remote power supply. DC power from the temporary power supply was then passed through a 0.5-amp fuse to the panel, allowing all panel alarms to be functional. The redundancy of power supplies accomplished by the normal line up was maintained, and there was no impact on the electrical system capacity, output, or voltage. No unreviewed safety question was involved.

SE-95-285-DE

BATTERY REPLACEMENT FOR CABLE SPREADING ROOM HALON SYSTEM

Electrical Panel back-up batteries for Cable Spreading Room Halon System were replaced with equivalents. The materials of the new batteries are the same as the originals and no new failure modes were introduced. This change did not increase load on any Unit 2 vital or non-vital buses. Electrical and mechanical redundancy as well as isolation and separation were not effected. Human interactions remain the same. No unreviewed safety question was involved.

SE-95-286-DE and SE-95-287-DE

REPLACE FLOW SWITCHES

The Isophase Bus Duct B Phase Fan #23 Return Air Low Flow Switch was replaced with a switch that operates in the same manner as the original. Materials of the new switch were compatible with the original installation. The replacement switch did not change the electrical system or electrical loading. It is non-seismic and located in a non-seismic

area. This switch replacement did not place the plant in any configuration requiring compensatory measures. No unreviewed safety question was involved.

SE-95-288-MD

INSTALLATION OF TECHNICAL SUPPORT CENTER (TSC) DIESEL ENGINE STATUS INDICATION

This modification installed a level indicating system in the TSC Diesel Engine radiator expansion tank to monitor the cooling water for an acceptable level. A level transmitter and indicator were provided at the TSC Diesel Engine radiator. An indicator with high/low alarm was provided at the TSC Diesel Generator control panel. The high/low alarm was connected in the TSC Diesel Generator control panel to a new indicating light, and to existing common annunciator windows, one at the control panel and another in the TSC Annunciator Room. Materials used for this modification were the same as and compatible with the original installation. There was no impact on Unit No. 2 safety bus or emergency diesel loading since the new level indicating system was powered from Unit No. 1 distribution panel "DG." A fire protection review was performed and this modification found acceptable. This modification had no safety function. No unreviewed safety question was involved.

SE-95-289-TM

DEFEAT OF FAN LOW FLOW ALARM

The Isophase Bus Duct Fan 22 low flow alarm was giving spurious signals and was temporarily defeated. The fan was in service, and fan failure would have been detected by an operator during rounds or by a high temperature alarm. Fan 21 remained in service with an operable low flow alarm, and the defeat of the fan 22 low flow alarm had no impact on any system capability or design parameter. No unreviewed safety question was involved.

SE-95-290-PR

TEMPORARY CHANGE TO THE FULL SYSTEM DECONTAMINATION RESIN SLUICE PROCEDURE

A temporary change to the Full System Decontamination (FSD) Resin Sluice Procedure was implemented to remove the requirement for continued flushing of vessels until the vessel dose rates reached 20 m/R. The residual radiation levels were conservatively bounded by EQ qualification analysis of integrated dose limits. The scope of this procedure was limited to the operation of the Decon Process System (DPS) to process resin stored in vessels in the Drum Storage Room. This procedure did not install or modify any IP-2 equipment or controls. The DPS physically interfaces with IP-2 systems at the DPS equipment supports and primary water, service air and waste system services only. Physical plant interfaces were addressed separately as part of the DPS installation. The IP-2 systems were operated within design parameter ranges during the DPS operation. The contaminated spent resin that resulted from the FSD were contained in the DPS equipment located in the Drum Storage Room. These resins were sluiced into High

Integrity Containers and then shipped for burial. Upon completion of FSD resin sluice and vessel washdown activities, the DPS equipment was removed via a disassembly procedure. No unreviewed safety question was involved.

SE-95-292-MM

N₂ BACKUP TO UNIT 2 SPENT FUEL POOL GATE

A nitrogen back-up system was in the Fuel Storage Building, to provide a continuous supply of sealing air pressure to the Unit 2 spent fuel pool gate seals in the event of loss of station air. The modification prevented a possible spent fuel pool-leakage path of pool water into the transfer canal, which could have led to a low water level in the spent fuel pool. A relief valve was installed between the regulator and the line connection to vent the Nitrogen tank in case of a nitrogen tank regulator failing open. There were no Class A system components in this area. Compatible materials were utilized in the modification and no electrical work was involved. The Nitrogen system is non-seismic but tubing located in the Fuel Storage Building was seismically restrained. No EQ equipment was affected by this modification, there was no impact on the Environmental Technical Specification. No unreviewed safety question was involved.

SE-95-294-PR

FULL SYSTEM DECON SPENT RESIN TRANSFER

A step list was implemented to provide instructions for the operation of the vendor owned equipment used to transfer and dewater spent resin from the Full System Decon equipment. All of the dewatering equipment was on a skid located in the Fuel Storage Building where it was protected from external events and had no adverse effect on surrounding equipment. The only failure mode introduced, a spent resin spill, was minimized by the precautions and limitations established within the step list. The transfer and dewatering did not alter any plant equipment nor disable any safety system. There were no impacts on any electrical systems or loads. No unreviewed safety question was involved.

SE-95-295-MD

GAS TURBINE #1 DEAD BUS CLOSURE

A new Potential Transformer (PT) was installed to prevent closing the Gas Turbine #1 output breaker to a live bus due to a false indication from single fuse failure. Failure for this installation would require that two of the new primary side PT fuses fail and give a false dead bus signal, which could allow closure of the turbine output breaker to a live bus. This reflects an improvement over the previous situation, in which a single fuse failure could give the dead bus signal. The change does not affect the operability of any system, no UFSAR changes were necessary, the Technical Specifications and their bases were not affected, and no other documents considered a part of the licensing basis were affected. No unreviewed safety question was involved.

SE-95-296-MD

UNIT 1 WATER TREATMENT PLANT MONITOR ENHANCEMENT

This modification installed a new alarm and an automatic trip of the Evaporator Input Pumps on a high-conductivity effluent signal from the Unit 1 Water Treatment Plant. Tripping the pumps stops the Water Treatment Plant supply of water. The change did not affect any system parameters, and the change was to non-safety related equipment. All new cable/wiring was internal to existing panels, and existing spares in conduit and trays were used between panels. New loads were added to existing, non-class, Unit 1 power supplies. No unreviewed safety question was involved.

SE-95-297-TM

ELECTRIC POWER SUPPLY FOR HAZMAT TRAILER

A fused disconnect established for auxiliary usage was employed to supply power to the Hazmat trailer. The wiring and application of this temporary modification were well within the design parameters of the switch, so no new failure modes were introduced. The wiring was run independently of cable trays and was properly restrained along its entire length, and system operability was not affected by the modification. No Class 1E equipment was affected. No unreviewed safety question was involved.

SE-95-298-TM

PRIMARY AUXILIARY BUILDING (PAB) SUMP PUMP

A temporary PAB sump pump was installed to provide a drain path for dewatering the Reactor Coolant System full system decontamination skid located in the drum storage room and the resin cask located in the Fuel Storage Building. The PAB sump pumps are equipped with a spare connection (tee) designed to accept a spare pump. Hoses were run to the tee connection. Though the temporary pump could have failed on loss of air or discharge hose rupture, both failures would have been mitigated by frequent operator surveillances and a functional PAB sump high level alarm. No unreviewed safety question was involved.

SE-95-299-DE

REPLACE CHART RECORDER FOR #21 HOUSE SERVICE BOILER

An indicating recorder that required a backup battery to retain the program that operated the unit in case of a power failure was replaced with a recorder that does not require a battery to retain the program. There was no change in power requirements, no cable was added or rerouted, seismic capability was not a consideration since the equipment need not be functional following a seismic event, and the change was not inside the vapor containment. No unreviewed safety question was involved.

SE-95-300-TM

FILL FEEDWATER HEATER WITH WATER FROM THE CONDENSATE STORAGE TANK (CST)

The shell side of feedwater heater 21A was filled with water from the condensate storage tank. The fill was performed to identify suspected tube leaks and was accomplished by installing a hose from condensate storage tank drain stop to the feedwater heater drain stop. Approximately 200 to 300 gallons of water were used, less than one percent of the CST capacity, so the safety related function of the CST was not affected. The filling process was coordinated and observed by an operator, and had the hose leaked or broken the drain stop would have been isolated to prevent a reduction in the CST capacity. All equipment involved in this temporary modification was of material compatible with the existing systems. No unreviewed safety question was involved.

SE-95-301-TM

MAIN LUBE OIL COOLER FILL LINE

During main turbine generator shutdown, a temporary hose connection was used to fill the north cooler. The hose was used only prior to the lube oil flush while the system was not in operation, so no system parameters were affected. Though the hose could have failed, it was under low pressure and the effects of a failure would have been mitigated by the operations personnel who were present when pumping was in progress. No unreviewed safety question was involved.

SE-95-304-TM

FME BARRIER FOR TURBINE BEARING OIL SYSTEM

Plugs were placed in the #1 bearing pedestal oil return line and vent line during repairs on the high pressure turbine. Because the bearing oil system was tagged out while the turbine repairs were in progress, the operability of the system was not affected. The plugs were of the type used frequently in systems containing oil, so there were no material concerns. No unreviewed safety questions was involved.

SE-95-305-TM

HIGH PRESSURE STEAM DUMP VACUUM INTERLOCK BYPASS

With the main steam isolation valves closed and the unit shut down, the interlock on condenser vacuum was bypassed so the steam dumps could be tested. The change was only used when there was no vacuum in the condenser, so the steam dumps were not required to be operable. No unreviewed safety question was involved.

SE-95-306-TM

CHANGE IN TURBINE VIBRATION INDICATOR SETPOINTS

The alarm and danger setpoints for two turbine bearings were raised. An irregularity on the turbine shaft was causing an erroneous vibration indication of 3 mils on each of these probes. The change did not affect the point at which the turbine would have tripped, for it would still have tripped at an actual vibration of 10 mils. This modification was the

change of electronic setpoints, so no new materials were introduced and the plant's mode of operation was not impacted. No unreviewed safety question was involved.

SE-95-307-TM

TEST RUN OF HEATER DRAIN TANK PUMP MOTOR

The motor of heater drain tank pump 21 was uncoupled and tested. The pump was tagged out, so there was no effect on plant operations, a dummy signal was inserted to clear the low flow trip. No new materials were involved, no new equipment was added, and there was no impact on electrical system capacity. Although the system is high energy, no mechanical components were reconfigured from the original design. No unreviewed safety question was involved.

SE-95-309-TM

ALTERNATE BATTERY FOR STARTING DIESEL

The GT-1 starting diesel was jumpered to connect it to an alternate starting battery bank. The jumper was only applied while GT-1 was out of service, and the alternate batteries were compatible with the existing bank. The only failure mode introduced with this jumper was a possible failure to start the starting diesel; this was of no consequence, since the jumper was only applied when GT-1 was out of service. The alternate battery bank consisted of two 12-volt batteries and did not challenge the GT-1 support structure or building. No unreviewed safety question was involved.

SE-95-310-TM

NORTH HYDROGEN COOLER ALTERNATE FLOW PATHS

Three hoses were installed on the outlet of the generator hydrogen north cooler in an attempt to restore normal outlet flow. The normal 6" outlet piping was apparently blocked, and this modification using the hoses assisted in maintaining continued plant operation. With the three hoses, the total flow rate was not expected to exceed that of the original 6" line. The hoses were rated at a minimum of 50 psig, so were compatible with the existing installation. No unreviewed safety questions was involved.

SE-95-311-TM

REMOVAL OF ISOPHASE MAKEUP AIR ORIFICE

The B phase Isolated Phase Bus was operating at higher temperatures than the A and C phase buses, so a 3" orifice located in the B phase Isolated Phase Bus Duct makeup air inlet was removed, lowering the B phase Isolated Phase Bus temperature. Electrical and mechanical redundancy, isolation, and separation were not impacted by this change, and there was no change in electrical system capacity, output, or voltage. No unreviewed safety question was involved.

SE-95-312-TM

PROVIDE FLOW PATH FROM UNIT 1 SUMP TANK TO WASTE COLLECTION TANK

A flow path was provided from the Unit 1 CT-T26 Sump Tank to the Waste Collection Tank to facilitate decontaminating the Sump Tank and reducing radiation levels in the vicinity. The flow path consisted of hoses and a Sandpiper, connected to valves that provided a flow path to the two tanks. The flow path was connected only while cleaning the Sump Tank. No safety related function was changed. There was no unreviewed safety question.

SE-95-313-TM

ISOPHASE BUS DUCT COOLER OUTLET TO DRAIN

The service water outlet flow from one Isophase cooler was interrupted and routed to a drain instead of being allowed to follow its normal discharge flow path. This drain pathway was established to determine the degree of flow degradation through the Isolated Phase Bus Duct Cooler. The impact on thermal/hydraulic parameters was part of the determination to be made by the trouble shooting. Hoses and fittings compatible with the existing installation were used, and there were no seismic requirements for this system. No unreviewed safety question was involved.

SE-95-314-TM

UNIT 1 STATION AIR COMPRESSOR TEMPERATURE PROBES

Temperature probes that trip Unit 1 station air compressor 11 on high temperature were faulty and consequently removed from service. With the probes removed from service for repair, the high temperature trip was defeated to allow continued compressor operation. This was acceptable since a provision was made for increased monitoring of temperature. This temporary modification to Unit 1 station air compressor 11 did not impact Unit 2 operability. No unreviewed safety question was involved.

SE-95-315-TM

ISOPHASE BUS HEAT EXCHANGER ALTERNATE COOLING WATER SUPPLY

There was a suspected flow blockage in the service water supply to "B" isophase bus duct heat exchanger 24, so a hose was run from a service water tee to an elbow (with a threaded nipple) that was welded into the inlet of the heat exchanger. The hose was rated for a pressure of 100 psi and was used to supply additional cooling water to the heat exchanger. Failure of the hose would have resulted in the loss of the additional cooling water, but the remaining cooling capacity would have been the same as existed before the modification. The materials used were compatible with the existing installation, and the additional water supplied was from the same source as the normal water. No unreviewed safety question was involved.

SE-95-316-TM

FLUSH AIR CONDITIONER COOLING COILS

A hose was run from the drain valve on Unit 1 condensate storage tank 13 to the Unit 2 air conditioner coils so the coils could be flushed. The materials for this temporary modification were compatible with the existing installation. There was no impact on the plant's mode of operation, and there was no requirement that the equipment be functional following a seismic event. No unreviewed safety question was involved.

SE-95-317-TM

OPEN DOOR IN MOTOR CONTROL CENTER

A cubicle door in a motor control center was temporarily opened. The cubicle serves the Fresh Air Tempering Unit, part of the Fuel Storage Building Ventilation system. The open door allowed increased air circulation in the cubicle. It was barricaded and posted to prevent personnel injury. There is no safety-related equipment in the area. No unreviewed safety question was involved.

SE-95-318-TM

STORM DRAIN FLUSHING

A fire hose was connected to a fire hydrant to supply high pressure water for flushing a storm drain. The amount of water used was less than the amount which would have impaired the fire protection system, and the flushing activity would have been stopped had the water been needed for fire fighting. The fire hose was compatible with the fire hydrant and the water system. No unreviewed safety question was involved.

SE-95-319-TM

ALTERNATE MEANS TO PUMP SEWAGE FROM UNIT 1 SEWAGE BASIN

A sandpiper pump and associated hose were installed to pump sewage from the Unit 1 sewage basin to the common discharge header of sewage pumps #11 and #12. This permitted continued use of the site sewage treatment facility while repairs were made on pumps #11 and #12. The hose was capable of withstanding the full discharge pressure of the sandpiper, which is the same as or lower than the discharge pressure of pumps #11 and #12. This installation added negligible weight to the supporting structures, and there was no effect on analyzed accidents. No unreviewed safety question was involved.

SE-95-320-TM

MAIN FEEDWATER PUMP BEARING TEMPERATURE SETPOINT CHANGE

The inboard bearing of main feedwater pump 21 was constantly a few degrees above the alarm setpoint with the plant at full power and both main feedwater pumps in operation. With the concurrence of the manufacturer, the setpoint was raised from 172F to 180F, restoring the alarm to functional status. This was a setpoint change only. No unreviewed safety question was involved.

SE-95-321-TM

CONDENSER OUTLET WATER BOX LOW LEVEL ALARM

The condenser outlet water box low level alarm devices were physically located in such a way as to never clear, regardless of water level. The alarm was disabled by lifting and taping two wires. This action affected only one of six water boxes, and there were other means of detecting low water level: central control room indication of circulator pump motor current (also an indication of low water level) and field operator readings of vacuum as well as levels in sight glasses. This temporary modification was implemented during engineering investigation of the alarm device locations. No unreviewed safety question was involved.

SE-95-322-MM

CHANGE INDICATION LIGHTS FOR VALVES V-310 AND LCV-112A

As a result of Human Factors Report HPES #93-04, the color of the lenses of the indication lights in the Central Control Room for Valve V310 and Valve LCV-112A were changed. The normal function of the system was not changed; the change simply gives the operator positive indication of the position of each valve. There was no change to electrical or mechanical redundancy, isolation, or separation, and no load was added to any bus. No cable was added or re-routed. No unreviewed safety question was involved.

SE-95-323-TM

PROVIDE DRAIN FOR DECONTAMINATION SKID

A hose was connected to drain the decontamination skid (used for the full system decontamination) to the Primary Auxiliary Building sump. The skid contained demineralizers and other equipment for the Full System Decontamination performed in 1995. The drain hose was used only with an operator in attendance. Operability of other systems was not impacted and no unreviewed safety question was involved.

SE-95-324-DE

REPLACE MALFUNCTIONING VALVE AF-135

Valve AF-135 could no longer be closed, so it was replaced with a valve that provides the performance originally specified. The carbon steel replacement valve meets the piping specification of the system, as does its 800# rating. The valve need not be functional following a seismic event. No unreviewed safety question was involved.

SE-95-325-TM

POWER FOR CHEM NUC CONTROL SKID

A 100-amp fused disconnect was used to supply a maximum of 60 amps to the Chem Nuc control skid. The wiring and application were within the capability of the switch, and the copper wiring of the connection was of sufficient size for the application. The modification did not affect diesel loading or station battery usage, and the equipment of the modification had no potential to interact with safety related equipment. No unreviewed safety question was involved.

SE-95-326-TM

AIR SUPPLY TO THE RCS FULL SYSTEM DECONTAMINATION (FSD) SKID

A high pressure hose was used to supply clean station air to the FSD skid. The connection and high pressure hose were compatible with the design parameters and materials of both the station air system and the FSD skid. The air supply was from a service connection and did not impact other operating equipment. A line rupture would have been detected by a decrease in the service air pressure, and the area of the modification was one toured through regularly by operators. The hose was restrained by cable ties along its length, and it did not pass through an area containing safety related equipment. No unreviewed safety question was involved.

SE-95-327-DE

REPLACE RELIEF VALVES FO-53, FO-57, FO-549, AND FO-560

Fuel Oil Relief Valves FO-53, FO-57, FO-549, and FO-560 were replaced with valves that perform in a manner identical to that of the replaced valves. There was no impact on the operability of any system, and there was no impact on any system's design pressures, temperatures, or flow rates. The material of the replacement valves meets the system's piping specification. The valves need not be functional following a seismic event, and the change does not impact the analyzed accident response times or the response characteristics of any instrumentation. The installation process and/or testing did not result in a plant configuration that required compensatory measures to ensure compliance with design and regulatory requirements. No unreviewed safety question was involved.

SE-95-329-MM

PROVIDE FLUSHING STEAM TO MAIN TURBINE LUBE OIL RESERVOIR

Carbon steel piping and valves were installed to supply auxiliary steam to the Main Turbine lube oil reservoir from the House Service Boilers for the purpose of flushing the reservoir. The carbon steel piping and valves of the modification are the same material as the existing systems material. The flushing operation is performed only when the Main Turbine is secured, so there is no impact on the operability of any system; only the loading of the House Service Boilers is affected. The maximum pressure of the House Service Boiler steam header is less than 275 psig, so the system is not considered "high energy." The modification added approximately 3.5 feet of 2" pipe and a 2" gate valve to connect the auxiliary steam pipe to Main Turbine Oil Purifier R4D4 with a retired Unit 1 auxiliary steam pipe. Both pipes are supported in the vicinity of the modification, and no significant additional stress or loading was added. The gate valve in the new line provides isolation when the modification is not in use. No unreviewed safety question was involved:

SE-95-330-DE and SE-95-331-DE

REPLACE VALVE AS-1058 AND VALVE AS-1059

Auxiliary Steam valves AS-1058 and AS-1059 were replaced with valves that operate in the same manner as the originals. The changes did not have any operating impact, and no

system parameters were changed or affected. The materials of the new valves are compatible with the existing installation, and the valves are mounted in the same configurations as the original valves. The valves are located in the Unit 1 Utility Tunnel, so are not in a seismic area and are unaffected by external events. No unreviewed safety question was involved.

SE-95-332-MM, Rev. 1

REPLACE TEMPERATURE CONTROLLER TIC-1102

The Main Turbine lube oil temperature indicator/controller monitors the lube oil temperature and controls the temperature by modulating the control valve TCV-1102. An existing, obsolete, filled-capillary temperature indicator/controller was replaced with an electronic indicator, controller and Resistance Temperature Detector (RTD) that are more reliable and easier to calibrate. The RTD temperature sensor was located in an existing thermowell and does not come in contact with the process fluid, and all other electronic/mechanical components for this modification were selected to suit the environment in the Turbine Building at the appropriate elevations. The conduit and cable for the modification are run independently of vital trays or conduits, and the small length of cable added in the Central Control Room is run parallel to existing cables and harnessed suitably. The current draw of this modification is approximately 190 milliamps, an acceptable increase in loading of the affected bus. The equipment of this modification is non-Class A, non-1E, and non-seismic. No unreviewed safety question was involved.

SE-95-333-MM

REMOVAL OF RETIRED ELECTRICAL HEAT TRACE EQUIPMENT

Existing Electrical Heat Trace lines had been disconnected and retired in place and were not performing any function. The purpose of this modification was to "clean up" the premises by removing control cabinets, transformers, supports, and conduits and cutting cables that protruded from pipes' thermal insulation. No operating system was affected in any way. No unreviewed safety question was involved.

SE-95-334-EV

OPERATION WITHOUT DOORS ON ELECTRONICS CABINET

The 3 bay Reactor Vessel Level Indication System (RVLIS) electronics cabinet was operated without any of its doors, which was a configuration that differed from the one that formed the basis for the vendor's environmental and seismic qualification. The cabinets had been seismically qualified with the doors closed, and the design of the internal ventilation features normally would assume the doors were closed. The modification was the removal of the doors, which did not affect any safety-related function, did not introduce any functional change to any plant system or component, did not introduce any new failure modes, and did not reduce the margin of safety as defined in the Technical Specifications. With the doors removed, the RVLIS will remain

functional during and after a Safe Shutdown Earthquake. No unreviewed safety question was involved.

SE-95-335-DE

REPLACE ASBESTOS GASKETS WITH GRAPHITE GASKETS

The asbestos gaskets of valve TCV-1257B were replaced with graphite gaskets. The replacement gaskets operate in the same manner as the original gaskets, and their materials are compatible with the existing installation. The replacement gaskets meet the requirements of the valve specifications. The valve is non-seismic, is located in a non-seismic area, and will not affect adversely any safety-related system or equipment in a seismic event. No new failure mode was created by this gasket replacement. No unreviewed safety question was involved.

SE-95-336-DE

REPLACE VALVE UH-1116

Valve UH-1116 was replaced with a valve that operates in the same manner as the original. The change did not have any operating impact, and no system parameters were changed or affected. The materials of the new valve are compatible with the existing installation, and the valve is mounted in the same configuration as the original valve. The valve is located in the Unit 1 Screenwell House, is not in a seismic area, and is unaffected by external events. No unreviewed safety question was involved.

SE-95-337-TM

STEAM GENERATOR LEVEL DEVIATION ALARM RELAYS

The bistable on steam generator 24 had failed, causing the common steam generator level deviation alarm to annunciate. Spiders were placed on the high-level and low-level relays controlled by the failed bistable, thereby removing the failed input and allowing the inputs from the other three steam generators (21, 22, and 23) to function normally. The only failure mode associated with this temporary modification was the loosening and falling-off of the spiders, which would have caused the alarm to annunciate; the failure of the spiders would have been readily apparent in a visual inspection. No unreviewed safety question was involved.

SE-95-340-TM

INSTALL ELECTRIC HEATERS AND RETIRE STEAM PIPING

Electric heaters were installed to prevent freezing of the Waste Distillate Storage Tanks, which had previously been heated by steam from the House Service Boilers. Steam and condensate piping was removed at the tanks, in the Chemical Systems Building and at the side of the Superheater Building. The electric heaters were connected to receive power from a Unit 1 MCC. The purpose of the modification was to simplify maintenance and eliminate the need for a radiation monitor for the condensate return. The system, including the MCC, is not safety related. The electric heating serves the same function as the steam heating. No unreviewed question was involved.

SE-95-341-DE

REPLACE DISCHARGE WATER TEMPERATURE PROBE PIPING

The brass and bronze piping used to hold the discharge water temperature probes in place had deteriorated, so it was replaced with stainless steel piping. The new material, stainless steel grade 304 or 316, is acceptable for use in this application because the stainless steels are materials specified for use in the Service Water System. The installation is not required to be seismic, and there is no change to the operation of the temperature probes. No unreviewed safety question was involved.

SE-95-342-TM

CURRENT MEASUREMENTS ON MODULATING HEATERS

A 480-v breaker was tripping on long delay overload, so clamp-on ammeters were used to obtain current readings on individual groups of modulating heaters. The ammeters were installed on the wires from the current transformers to the Amtector, and provided input to a recorder without intruding on the existing system. The probes and the recorder were seismically secured in the 480-v switchgear room so they could not impact any equipment in the vicinity. Cable trays were not affected, because only instrument wires were being run to a recorder. No unreviewed safety question was involved.

SE-95-343-MM, Rev. 1

REPLACE BATTERY AND ADD UNDERVOLTAGE RELAYS IN UNIT 1 DC SYSTEM

Battery #12 in the Unit 1 125-volt DC System showed warped and cracked cell plates as well as cell deposits at the bottom of each cell. These batteries supply DC power to miscellaneous site loads and to the Unit 2 Main Boiler Feed Pump Turbine Emergency Oil Pump. Batteries #11 and #12 had been connected directly to the DC panel through a breaker, so inadvertent opening of the battery output breaker could have gone undetected, leaving the batteries isolated from the battery charger and its load. Battery #12 was replaced, and undervoltage relays were installed for batteries 11 and 12. The relays were tied to an existing category alarm in the Central Control Room. Except for the Main Boiler Feed Pump Turbine Emergency Oil Pump, which is not safety related, Battery #12 has no interface with any Unit 2 equipment. New Battery #12 bank has the same output ratings as the existing bank had, and no cable was added or rerouted. During the installation/testing process, a temporary DC feed was provided for the Battery #12 loads. No unreviewed safety question was involved.

SE-95-344-PR, Rev. 1

USE OF RIVER WATER IN FUEL OIL PIPING AND 11 FUEL OIL STORAGE TANK

A procedure was developed for filling and draining fuel oil piping and the 11 Fuel Oil Storage Tank with river water for hydrostatic testing. No safety-related systems or equipment required for accident prevention were involved, there were no increases in the consequences of any previously evaluated accident, an accident of a different type was not created, and there was no reduction in the margin of safety contained in the Technical Specifications or their bases. The procedure is not specifically listed, nor is it implied, in

the UFSAR. No load was added to any Unit 2 bus, vital or non-vital, for water pumped within the procedure was moved by a separate, diesel-powered pump. No cable was added or re-routed. No unreviewed safety question was involved.

SE-95-346-TR

TEMPORARY REPAIR TO ELBOW DOWNSTREAM OF OUTLET STOP VALVE

Leak Repair was used for the temporary fix of a leak in the elbow downstream of MS-102-58, Outlet Stop Valve for Main Steam Trap MST-44. The repair did not affect how the trap normally operates, and no system parameters were changed or affected. Though the MST line is considered high energy, the temporary repair did not create a new high energy line break possibility. The existing supports adequately support the leak repair clamp, and the clamp was engineered to the system design. No unreviewed safety question was involved.

SE-95-347-DE and SE-95-348-DE

REPLACE VALVE 3 EX-38-12 AND VALVE CD-66-2

Valve 3 EX-38-12 and Valve CD-66-2, located on the 15' elevation of the Turbine Building, were replaced with valves that operate in the same manner as the originals. The replacements did not affect the plant's mode of operation, did not change or affect any system parameters, and are compatible with the existing installations. The replacement valves, which were mounted in the same non-seismic configurations as the originals, are not located in a seismic area and do not interact with any seismic equipment or system. The valves are non-electrical and do not affect any instruments or controls. No unreviewed safety question was involved.

SE-95-349-DE

CHESTERTON 442 MECHANICAL SEAL

This evaluation of the use of Chesterton 442 mechanical pump shaft seals for the Unit 1 HTF pumps showed there were no new failure modes introduced by the change and that there was no impact on the operability of pumps or systems during normal, abnormal, or accident conditions. The materials of the seal are compatible with the process fluid and the pump shaft/stuffing box. The pumps are non-seismic and are located in an area that does not contain safety-related equipment. The change had no impact on the Fire Protection Program Plan or on radioactive effluents or radiation exposures. No unreviewed safety question was involved.

SE-95-350-DE

REPLACE RETURN AIR LOW FLOW SWITCH

The Isophase Bus Duct A Phase Fan #22 return air low flow switch was replaced with a switch that operates in the same manner as the original. The switch performs alarm function only, is compatible with the existing installation, is not 1E, and will not change the electrical system or any electrical loading. The switch is non-seismic and is located in a non-seismic area; furthermore, it does not interact with any seismic equipment or

system. The new switch is supported adequately by the existing installation, since the old and the new switch are exactly the same weight. No unreviewed safety question was involved.

SE-95-351-TR

TEMPORARY REPAIR TO MAIN STEAM TRAP (MST) VALVE MS-99-221

Valve MS-99-221, Outlet Stop Valve for trap assembly MST-48 was repaired using Leak Repair. With the temporary repair, the valve operates in the manner for which it was designed and does not affect the plant's mode of operation. No system parameters were changed, and the materials of the temporary repair were compatible with the existing installation. The valve is non-seismic, is located in a non-seismic area, and does not interact with any seismic equipment or system. The valve is located in the Turbine Building and is not affected by external events. No unreviewed safety question was involved.

SE-95-352-DE and SE-95-353-DE

REPLACE VALVE MS-99-221 AND VALVE AS-807

Leaking Outlet Stop Valve MS-99-221 and Valve AS-807 were replaced with valves that operate in the same manner as the originals. The new valves do not affect the plant's mode of operation, and all equipment operates as it did prior to the replacement. The materials of the new valves are compatible with the existing installation, and no system parameters were changed or affected. The valves are non-seismic, are located in non-seismic areas, and do not interact with any seismic equipment or system. The valves are located in the Turbine Building and are not affected by external events. No unreviewed safety question was involved.

SE-95-354-TR

TEMPORARY REPAIR TO MAIN STEAM TRAP (MST) VALVE MS-99-221

Valve MS-99-221, Outlet Stop Valve for MST-48 trap assembly, was repaired using Leak Repair. The temporary repair affected how the valve normally operates; the valve remained open in a fail safe mode, and additional valves on the trap assembly could be used to isolate the line if necessary. No other system parameters were changed, and the materials of the temporary repair were compatible with the existing installation. The valve is non-seismic, is located in a non-seismic area, and does not interact with any seismic equipment or system. The valve is located in the Turbine Building and is not affected by external events. No unreviewed safety question was involved.

SE-95-356-TM

DEMINEALIZED WATER FOR STATOR WATER TANK FLUSHING

A hose was used to provide demineralized water for flushing the stator water tank. Stator water tank flushing operations can only be carried out when the plant is shut down, and the only possible failure associated with this temporary modification was the rupture of the demineralized water hose. Had this failure occurred, its effects would have been

mitigated by the presence of an operator during all flushing operations. No unreviewed safety question was involved.

SE-95-357-TM

SUPPLY FLUSH WATER TO CHEMICAL AND VOLUME CONTROL SYSTEM HOLDUP TANK

A hose was installed from the primary water storage tank outlet drain to the Chemical and Volume Control System (CVS) recirculation pump 21 local sample line. This hose allowed demineralized nuclear plant systems water to gravity fill the CVCS 21 holdup tank. This connection did not affect the safety related function of either of the two systems, because it was applied only when the plant was in the cold shutdown condition. The hose and fittings were checked for leakage. The hose was restrained to prevent interference with other equipment during a possible seismic event, and it did not present an excessive load to any plant equipment. No unreviewed safety question was involved.

SE-95-359-TM

REPLACE FAILED AIR REGULATOR

The regulator that provided instrument air at pressure to a pneumatic flow transmitter on the hydrogen supply header to hydrogen recombiner 22 failed. The regulator was beyond repair and a direct replacement was not available. The failed regulator was replaced with a regulator that had the same design criteria and the same pressure and flow characteristics as the original. Because the new regulator has the same design characteristics as the original installation and was seismically mounted, no new failure modes were introduced. The new and old regulators are functionally identical. No unreviewed safety question was involved.

SE-95-360-TM

CHECK FOR LEAKS IN EXTRACTION STEAM LINE

The extraction steam line for feedwater heater 23C was filled with water to check for leaks. A hose compatible with the existing installation was used to fill the line, and the modification, performed with the plant in cold shutdown, did not impact system design pressures, temperatures, or flows. Since the extraction steam line normally contains steam, the introduction of water increased the load on pipe supports. The additional load due to the weight of water was analyzed, and the existing supports were determined to be adequate for the increased load. No unreviewed safety question was involved.

SE-95-361-TM

WATER SUPPLY FROM STATOR WATER TO TURBINE HALL CLOSED COOLING WATER (THCCW)

Demineralized water was routed via a hose from valve SC-62 in the stator water makeup line to THCCW heat exchanger shell drain valve CC-500. This was accomplished when the systems were inoperable, and the only failure mode was leakage from the hose during the period when the connection was operable and the associated systems out of service.

The valves could have been closed to isolate a leak, and a check valve was placed in the connecting line to prevent fluid return to the stator water system. All components of the modification were compatible with the existing systems, there was no safety related equipment in the area. No unreviewed safety question was involved.

SE-95-362-TM

WATER SUPPLY TO CONDENSATE STORAGE TANK (CST) WATER JET CLEANING UNIT

Fire protection system hydrant 29 was temporarily used to supply water to the CST Water Jet Cleaning unit. The hoses and fittings used were compatible with the existing hydrant, and the demand on the fire protection system from this temporary modification was only 20 gpm. This low flow did not impact the fire protection system pressure or capacity. The only failure mode introduced was a possible leak of water from the hoses, and this was acceptable since the total possible amount of leakage would not have challenged the high pressure fire water system capacity. In addition, personnel were present and could have isolated the hose had a leak occurred. No unreviewed safety question was involved.

SE-95-363-MD

INSTALL HAND GEOMETRY SYSTEM

A hand geometry system was installed. This installation involves safeguards information. No unreviewed safety question was involved.

SE-95-364-DE

REPLACE VALVE FO-9

The collar on fuel oil valve FO-9 was broken, so the valve was replaced with a valve that operates in an identical manner. The new valve is an 800# class, socket welded, carbon steel valve that meets the system's design specification. The valve is not required to be functional following a seismic event, and any small change in weight from the old valve to the new valve has negligible seismic impact since the valve is situated adjacent to a piping support. No unreviewed safety question was involved.

SE-95-365-DE

SIGNAL CONVERTER REPLACEMENT

Signal Converter LM-470A located in the Control Room was replaced to allow the level indicator to expand full scale as designed. The installation was seismically restrained. It did not impact the operability of the system. No unreviewed safety question was involved.

SE-95-366-TM

CORE EXIT TEMPERATURE INDICATION

This modification provided central control room indication of core exit temperature with the reactor shut down, the "bedspring" removed, and with the primary system at reduced inventory. The modification consisted of connecting two cables (one for each channel) between the bedspring core exit thermocouple connector and the reactor vessel head

thermocouple connector. The cable and connector assembly used was the same material as the permanently installed cables and connectors, and there were no increases in the consequences of equipment malfunctions previously evaluated. The core exit thermocouple monitoring system is a seismically installed system, and this temporary modification did not degrade the seismic capability of the system. No unreviewed safety question was involved.

SE-95-367-GM, Rev. 1

FIRE PROTECTION VALVE TAMPER SWITCHES

Tamper switches on various Fire Protection Valves were removed. Tamper seals and the Tamper Seal Program of inspection of the seals meet the requirements of the Fire Protection Plan for all the valves that the tamper switches were removed. This change did not affect the function of the valves or the function of any safety related equipment or function. No unreviewed safety question was involved.

SE-95-370-TM

REMOVAL OF THERMOCOUPLE FROM SERVICE

One thermocouple that provided a thrust bearing temperature trip for gas turbine GT-2 was jumpered out. A remaining thermocouple continued to provide thrust bearing trip protection. GT-2 operability was not impacted. There is no safety related equipment at GT-2. No electrical loads were added, changed, or removed. No unreviewed safety question was involved.

SE-95-371-DE

FRESH WATER HEAT EXCHANGER RECIRCULATION VALVES

The Fresh Water Heat Exchanger Recirculation valves on Unit No. 1 were replaced. The replacement valves are similar in design and function as the existing valves. The materials of the replacement valves met or exceeded the design specifications for the existing valves. This change did not affect the function of the valves or the function of any safety related equipment or function. No unreviewed safety question was involved.

SE-95-372-TM

INSTALL ORIFICE IN BLOWDOWN PURIFICATION SYSTEM DISCHARGE LINE

To facilitate flow through radiation monitor R-51, a 3/4" to 1/2" orifice was installed in the Secondary Boiler Blowdown Purification System (SBBPS) discharge line to canal downstream of the taps to R-51. There was no failure mode associated with this installation, for the orifice was placed where the line was designed to have an orifice; the only change was in the size of the orifice. The orifice material was compatible with the existing piping, and there was no change to the effluent processing capability of the SBBPS because the system was out of service. No unreviewed safety question was involved.

SE-95-374-DE

WASTE GAS TEMPERATURE INDICATOR

The temperature indicator for the Waste Gas System was replaced. This change did not affect the function of the Waste Gas Compressors. The replacement temperature indicator provided the same or better pressure boundary. No unreviewed safety question was involved.

SE-95-375-TM

TEMPORARILY BYPASS TURBINE RUNBACK FROM ONE DROPPED ROD

The dropped rod input from one control rod to the turbine runback circuit was temporarily bypassed. The purpose was to prevent spurious runbacks resulting from false signals from the dropped rod input that was bypassed. A dropped rod causes increased power peaking in the core. The runback was originally provided to ensure that the power peaking will not cause damage to the fuel. A special analysis was performed to supplement the standard reload analysis. It showed that, for the current core, runback is not necessary. All safety criteria were met with a dropped rod and no turbine runback; no unreviewed safety question was involved.

SE-95-376-TR

MAIN TRANSFORMER OIL COOLING HEADER DRAIN VALVE

A temporary repair was performed on the drain valve on the Oil Cooling Header of Main Transformer 21. The repair materials were compatible with the existing installation. This repair did not change the function of the transformer or the way the plant operates. No unreviewed safety question was involved.

SE-95-377-DE

EXTRACTION VALVES

Valves 6EX-9, 6EX-9-1 and 6EX-9-2 were replaced. The materials of the replacement valves are compatible with the existing installation. The new valves function in the same way as the original extraction valves. This change did not affect any safety related equipment or function. No unreviewed safety question was involved.

SE-95-378-DE

MAIN STEAM TRAP ISOLATION VALVE

The isolation valve, MS-99-238, for Main Steam Trap 52 was replaced. The replacement valve was steel construction identical to the existing valve. The new valve functions in the same way as the original valve. This change did not affect any safety related equipment or function. No unreviewed safety question was involved.

SE-95-379-TM

ALTERNATE POWER SUPPLY TO ALARM PANEL

A temporary alternate power feed was provided to one alarm panel. The panel has alarms associated with fire protection, secondary chemistry, 138kV power, station air, and

auxiliary steam. It was de-energized for approximately 1/2 hour to change the feed. Alternate monitoring was provided during that time. Normal power for the panel is supplied from Unit 1, as was temporary power. There was no effect on any equipment required for safe shutdown. No unreviewed safety question was involved.

SE-95-380-MD

PENETRATION H40 PERMANENT CABLE

This modification permanently installed cables for maintenance power in the electrical penetration areas and the Auxiliary Feedwater Pump Building. Trays and conduit within the safety related area and the pump building were installed to meet seismic and separation requirements. Electrical system impacts were addressed in SE-94-212-MD. The safety function of the electrical penetration was not affected. No unreviewed safety question was involved.

SE-95-381-MM

TECHNICAL SUPPORT CENTER (TSC) DIESEL FUMES

New crankcase ventilation filters were installed that improved the air quality in the TSC. The filters are specifically designed for this application by the manufacturer. This change did not affect any safety related equipment or function. No unreviewed safety question was involved.

SE-95-382-MD

WIRELESS LAN INSTALLATION

A new wireless LAN consisting of fiber optic cable, microwave transmitter and antenna and power supply was installed. The additional structural and electrical loadings did not affect any safety related equipment or functions. The additional combustible loading of the fiber optic cable was acceptable through the Fire Protection Plan review. No unreviewed safety question was involved.

SE-95-384-TM

EMERGENCY DIESEL GENERATOR (EDG) AIR START MOTOR RELIEF VALVE LEAKAGE

During EDG operation, associated air start motor relief valves leaked, causing the air compressor to cycle on and off too frequently. This problem was typical for all three EDGs. This modification temporarily installed a test assembly for data collection on one air-start motor system. The test assembly consisted of a pressure transducer and recorder, and it was installed between the relief valve and the air system served by the relief valve. The safety related function of the relief valve was not changed, for it still functioned as required, and all materials in the test assembly met the design specifications for the air start piping. The test assembly was added to a seismically supported line, but had the pipe failed the EDG could have been started by the other air start motor. No unreviewed safety question was involved.

SE-95-385-MM

VEHICLE BARRIER SYSTEM

A reinforced concrete barrier system outside the Protected Area and a reinforced access gate into the Protected Area was installed. This vehicle barrier system accomplished the NUREG requirement for prevention of malevolent vehicles from impacting vital equipment. No unreviewed safety question was involved.

SE-95-387-DE

FUEL OIL VALVE REPLACEMENT

Valve FO-664, the bypass for MOV-140, was replaced. The materials of the new valve met specifications. The replacement valve operates in the same manner as the original ones. No operational impacts were caused by this valve replacement. This valve did not interact with any safety-related system or equipment. No unreviewed safety question was involved.

SE-95-388-DE

FUEL OIL VALVE REPLACEMENT

Valve FO-149 was replaced. The materials of the new valve met specifications. The replacement valve operates in the same manner as the original ones. No operational impacts were caused by this valve replacement. This valve did not interact with any safety-related system or equipment. No unreviewed safety question was involved.

SE-95-389-TM

TEMPORARY SUMP PUMP

A temporary pump and hose were provided to flush the Primary Auxiliary Building Sump to the Waste Holdup Tank. The purpose was to eliminate a hot-spot that resulted from the full system decontamination. The pump and hose were used only with an operator in attendance. Plant operation was not affected. No unreviewed safety question was involved.

SE-95-390-DE

TRAVELING WATER SCREEN BLOWDOWN VALVE REPLACEMENT

The Blowdown Ball Valves on the 21 through 26 Traveling Water Screens were replaced. The materials of the new valves met specifications. The replacement valves operate in the same manner as the original ones. No operational impacts were caused by these valve replacements. The valves did not interact with any safety-related system or equipment. No unreviewed safety question was involved.

SE-95-392-TR

MAIN STEAM TRAP (MST) LEAK REPAIR

A temporary repair to the MST line downstream of MS-105-9 was made utilizing a repair clamp and Leak Repair. This repair did not affect any safety related system or equipment. The MST line is non-seismic. No unreviewed safety question was involved.

SE-95-393-PR, SE-95-407-PR and SE-95-408-PR

EMERGENCY DIESEL-GENERATOR HEAT EXCHANGER TEST

The jacket water cooler and the lube oil cooler for Emergency Diesel-Generator (EDG) 23 were performance tested to obtain baseline data for the new heat exchangers, in order to satisfy the requirements of NRC Generic Letter 89-13. Separate, similar tests were conducted for the coolers for EDG 21 and EDG 22. Instrumentation was provided to monitor cooler outlet temperatures and service water temperature and flow. During the test, the EDG used service water from the non-essential header, and its pressure was maintained in accordance with operating procedures. The safety function of the Service Water System was not affected. During loss-of-coolant accident conditions, the non-essential header is not required until the recirculation phase. During performance of the test, the EDG was not available for normal automatic operation. The EDG was declared inoperable during the test, and the minimum safeguards requirement for two operable EDGs was maintained. Technical Specifications were met. The test did not permanently modify any equipment associated with the operation of the EDG. No unreviewed safety question was involved.

SE-95-394-EV

THERMEX INSTALLATION

The installation of a "THERMEX" in the Unit No. 1 Chemistry Systems Building was evaluated. The "THERMEX" components include a phase separator, a charcoal filter bed, dual bag filters and a reverse osmosis unit. The new equipment advantages were improved processing of liquid waste, reduction of volume and reduced personnel radiation exposure. Interconnecting hoses are non-collapsible and reinforced. No safety related equipment or functions are affected by the "THERMEX" system. No unreviewed safety question was involved.

SE-95-395-TM

FIRE WATER FOR FUEL OIL STORAGE TANK CLEANING

High pressure fire water from hydrant 18 was used to clean the north fuel oil storage tank. A hose with a gated wye was connected to hydrant 18 and extended to the tank. While this temporary modification was in operation, any other non-fire-fighting use of fire protection water was prohibited. The use of fire protection water for the purpose of this modification would have been stopped immediately had the fire alarm sounded. The only added failure mode was possible leakage from the hose, and the amount of water lost because of that failure would not have been sufficient to impair the function of the fire protection system. Personnel were in continuous attendance while the modification was in use, there was no safety related equipment in the area, and the hose did not change the seismic capability of the hydrant. No unreviewed safety question was involved.

SE-95-396-DE

MAIN STEAM TRAP STOP VALVE

The stop valve, MS-94-7, for Main Steam Trap 32 was replaced. The replacement valve was steel construction identical to the existing valve. The new valve functions in the same way as the original one. This change did not affect any safety related equipment or function. No unreviewed safety question was involved.

SE-95-398-TM

WASTE DISTILLATE FLOW RECORDER

The waste distillate flow recorder required repair and was replaced. The replacement recorder was installed in the same location as the failed recorder and used the same power supply and signal wire. Electrical and mechanical redundancy, isolation, and separation were not affected. There was no safety related equipment in the area. No unreviewed safety question was involved.

SE-95-400-MM

NITROGEN SUPPLY MODIFICATION

An isolation valve for PCV-1076 and micron filters for PCV's 1076, 1076A and 1090 were installed. The isolation valve facilitated maintenance of PCV 1076. The filters remove debris and improved regulator valve operability. All the new equipment met the design pressure for the Nitrogen System. No safety related equipment or functions were affected by this modification. No unreviewed safety question was involved.

SE-95-401-DE

REPLACE TUBE BUNDLE FOR DIESEL GENERATOR JACKET WATER COOLER

The tube bundle of the 21 Emergency Diesel Generator Jacket Water Cooler was replaced. The new tube bundle, although thicker walled, is constructed of the same material and meets the design requirements and parameters of the original bundle it replaced. The heat exchanger with the new tube bundle installed in the original shell would be functional following a seismic event. No unreviewed safety question was involved.

SE-95-402-DE

REPLACE TUBE BUNDLE FOR DIESEL GENERATOR LUBE OIL COOLER

The tube bundle of the 21 Emergency Diesel Generator Lube Cooler was replaced. The new tube bundle, although thicker walled, is constructed of the same material and meets the design requirements and parameters of the original bundle it replaced. The heat exchanger with the new tube bundle installed in the original shell would be functional following a seismic event. No unreviewed safety question was involved.

SE-95-403-DE

INDICATING LIGHTS REPLACEMENT

Obsolete indicating lights were replaced with a direct replacement new model. The individual functional requirements of the original lights were retained. There was no impact on safety related equipment or functions. No unreviewed safety question was involved.

SE-95-404-EV

TEST VACUUM BREAKER EFFECT ON SAMPLE LINE

A test was performed to evaluate the effect of a vacuum breaker in the sample line to monitor R-51 installed in the Secondary Boiler Blowdown Purification System. The vacuum breaker was intended to maintain the line full of water so the discharges from a new north curtain drain tie-in could be monitored by R-51. The bonnet and internals of an isolation valve were removed and a fixture was installed with an isolation valve, a check valve and a pressure gauge. A temporary source of clean water was also installed. The test consisted of establishing flow, breaking vacuum, and observing the effect on R-51. Waste distillate discharges were isolated for the duration of the test. The portion of the system involved in the test was isolated from the remainder of the system, which was not affected by the test. Provisions were made to return the system to service if required. No unreviewed safety question was involved.

SE-95-405-EV

BYPASS FEEDWATER HEATERS

The feedwater train configuration was temporarily changed in order to repair components. Extraction steam to feedwater heaters 26A and 26B was isolated. The nuclear instrument system was calibrated to assure that reactor power did not exceed the licensed rating. Reactor power was controlled using normal plant procedures. The set point for Safety Injection initiation on high steam flow was conservative with respect to accident analysis assumptions. There was no increase in the probability of a reduction in feedwater enthalpy accident. Operation of the feedwater heaters is not required to mitigate the consequences of any accident. No unreviewed safety question was involved.

SE-95-409-DE

REPLACE NOZZLES IN FEEDWATER HEATERS

The extraction steam nozzles in feedwater heaters 26A and 26B were replaced with nozzles having greater wall thickness. There was no operating impact from this replacement. The supports are adequate for the greater weight. The piping is non-seismic and will not adversely affect any safety-related system or equipment in a seismic event. No unreviewed safety question was involved.

SE-95-410-TM

FLUSH CARBON FILTER FIRE PROTECTION DRAIN TANK

City water was provided to the carbon filter fire protection drain tank via a hose from the removed vent plug connection. The purpose was to flush a downstream radioactive hot spot, and a gauge glass was used to ensure overfill did not occur. The flush was performed in accordance with directions from Health Physics. The light, flexible hose did not pass through or across cable trays and was continuously manned when connected. Flush operations were required to terminate on any fire alarm. No unreviewed safety question was involved.

SE-95-411-TM

REPLACE PRESSURE INDICATOR

Pressure gauge PI-6602, local readout only, was replaced with a gauge of similar style and range. The new gauge was made of materials compatible with the existing system, and there was no impact on the plant's mode of operation or on any system's design pressures, temperatures, flow rates, or other parameters. There are no seismic considerations, for the original gauge was not installed to seismic requirements. No unreviewed safety question was involved.

SE-95-412-PR

USE OF UNDERWATER ROBOTIC DEVICE

Two robotic devices were used to perform underwater tasks including surveillance, inspection, vacuuming, and retrieval. They were used in the spent fuel pool, reactor cavity, refueling canal, reactor vessel, reactor coolant system, refueling water storage tank, and accumulators of Unit 2. They allow reduced personnel radiation exposures, improved personnel safety, and shorter outage. They were used in operating modes that do not require operability of affected equipment. Their weights are less than the weights that require control of heavy loads over safety related equipment or fuel. Technical Specification requirements and procedures cover a loss of cooling that might be postulated as result of their use. No unreviewed safety question was involved

SE-95-414-TM

REACTOR COOLANT PUMP VIBRATION PROBE DEFEAT

The "X" vibration probe on reactor coolant pump 21 failed and caused the "21 RCP High Vibration", a category alarm, to be constantly annunciated. In order to unmask this alarm and allow the operator to be alerted to a true vibration signal, the "X" probe was removed from service. This was accomplished in the central control room by placing a toggle switch to the defeat vertical position for 21 RCP. The "Y" probe remained in service to provide operators with vibration data on 21 RCP. With the "X" probe out of service, a supplemental log was maintained to monitor 21 RCP bearing temperatures and seal parameters. No unreviewed safety question was involved.

**SUPPLEMENTAL
10 CFR 50.59(b) REPORT OF
CHANGES, TESTS, AND EXPERIMENTS
MARCH 1998**

SAFETY EVALUATIONS DATED IN CALENDAR YEAR 1996

SE-96-001-DE

21-26 TRAVELING WATER SCREEN BLOWDOWN BALL VALVES

Blowdown valves on the traveling water screens on the circulating water system were replaced. This is not considered a high energy system, it only processes salt water, no radioactive materials, and is not EQ. Although it involves the dock area, there is no potential interaction with safety-related equipment on the dock. The replacement valve is equivalent to the original valve and is manually operated in the same manner as the original valve. The change did not involve Class 1E equipment, is non-electrical, did not involve any instruments or controls, nor is the equipment required to remain functional following a seismic event. No unreviewed safety question was involved.

SE-96-002-DE

REPLACEMENT OF PORV'S

Power operated relief valves were replaced with valves having "Quick-Change" trim. This change was located in the vapor containment building, represented an equivalent replacement of existing plant components, is strictly mechanical in nature and does not adversely impact any Class 1E equipment. This change maintains the seismic capability of the system and components per existing plant design criteria and did not impact the ISI/IST program. The valves are designed in accordance with the original Westinghouse design specification and fully satisfy all design requirements regarding seismic capability for this application. No unreviewed safety question was involved.

SE-96-003-DE

CHANGE GAUGE FI-1249

Flow Indicator FI-1249 was replaced by an exact replacement gauge from the original gauge manufacturer except that the gauge casing is made of aluminum instead of steel. Aluminum is compatible with the Post Accident Containment Venting System for the intended purpose, since it is located in the Steam Generator Blowdown Tank Room. This gauge change had no electrical nor instrumentation and controls impact. Neither did it have an impact on human engineering concerns, high energy, ISI/IST programs, or EQ. The change had no impact on the environmental evaluation. No unreviewed safety question was involved.

SE-96-004-DE

FP-46 VALVE REPLACEMENT

Fire protection valve FP-46 was replaced. The replacement valve is essentially identical to the original valve and the materials are identical. The replacement valves are ULIFM approved and meet all of the requirements of Fire Protection Program Plan and Appendix R. Therefore, this change has no impact on radioactive effluents or environmental conditions. No unreviewed safety question was involved.

SE-96-005-TM

INSTALL WASTE PROCESSING SKID

A skid-mounted waste processing unit was installed on the 70' EL. of the Unit 1 Fuel Handling Floor to add efficiency to the Waste Processing System used on Unit 1. The change has sufficient means of isolation should a leak occur and along with the existing Waste Processing System is independent of other plant systems. Potential failures are mitigated by alarm and automatic cutout features and additionally, a Rad Waste Tech is in attendance when this system is in service. The materials used in the change are compatible with the existing system and with the expected composition of the waste stream as well as the low levels of radioactivity expected. Although the processing skid was considered a high energy system, the vendor has stated that all hoses and connections that interface with existing plant systems have been hydro tested to 225 psig prior to installation therefore minimizing the risk of a break. No unreviewed safety question was involved.

SE-96-006-DE

REPLACE TUBE BUNDLE FOR DIESEL GENERATOR LUBE OIL COOLER

The tube bundle of the #22 Emergency Diesel Generator lube oil cooler was replaced. The new tube bundle, although thicker walled, is constructed of the same material and meets the design requirements and parameters of the original bundle that it replaced. The heat exchanger would be functional following a seismic event. No unreviewed safety question was involved.

SE-96-007-DE

REPLACE TUBE BUNDLE FOR DIESEL GENERATOR JACKET WATER COOLER

The tube bundle of the #22 Emergency Diesel Generator Jacket Water Cooler was replaced. The new tube bundle, although thicker walled, is constructed of the same material and meets the design requirements and parameters of the original bundle that it replaced. The heat exchangers would be functional following a seismic event. With the new tube bundle installed inside the shell of the heat Exchanger. No unreviewed safety question was involved.

SE-96-008-DE

REPLACE NITROGEN VALVE MANIFOLD

The Valve Manifold for 16 Bottle Nitrogen Bank and SGN-41 was replaced. Materials of the new manifold are brass alloy which is consistent with the previous installation. The new manifold is the same design, provides the same functions and is operated in the same manner as the old manifold. It is seismically restrained by the installation of supports. There is no new impact on the Nitrogen Gas System. No unreviewed safety question was involved.

SE-96-009-DE

REPLACE OBSOLETE PUSH TO TEST INDICATING LIGHTS

Installation of the new indicating light model resulted as a direct replacement of the obsolete indicating lights as specified by the manufacturer. The new indicating lights provide for ease of installation and for easy quick bulb replacement. This change will not be evident to the operators. The new lights look the same as the old, occupy the same position and have the same illumination levels. No unreviewed safety question was involved.

SE-96-011-DE

REPLACE BACKDRAFT DAMPERS FOR THE ELECTRICAL TUNNEL EXHAUST FANS

Installation of the new dampers for the Electrical Tunnel Exhaust Fans was due to the deterioration of the originals. The dampers prevent short cycling of the exhaust flow so as to ensure the ability to remove the anticipated heat load from the Electrical Tunnel. The replacement was treated as a modification although the new dampers are a like-and-kind replacement. The installation is equivalent to the original except that the damper was bolted to the plenum wall rather than using "pop rivets." A single 1/4" bolt would restrain the 125 pound load due to postulated ground acceleration produced at this location. Sixteen bolts were used, thus seismic restraint is maintained. No unreviewed safety question was involved.

SE-96-012-TM

UNMASK DC BUS TROUBLE ALARM

This jumper was installed to defeat 22 Battery Charger failed fan flow switch in order to unmask the 22 BUS trouble alarm. The fans provide cooling and are redundant to each other. One fan provides sufficient cooling and the failed fan will not be used while the jumper is in place. The jumper allows immediate indication of off normal condition of 22 DC BUS due to other functions that would have been masked. Failure of the jumper would result in re-energization of the alarm and investigation would be initiated. The safety function of the battery charger will not be affected by this jumper. No unreviewed safety question was involved.

SE-96-013-DE

SEWAGE RADIATION MONITOR, PUMP/MOTOR ASSEMBLY INTERCHANGE

The replacement equipment was installed on the R-57 skid which is located in the Superheater Building which provides protection from external events. The replacement unit is identical to the original unit and performs the identical functions. No unreviewed safety question was involved.

SE-96-014-DE

REPLACE CONTAINMENT HIGH RANGE PRESSURE TRANSMITTER

Containment High Range Pressure Transmitter PT-3300 was replaced. The new transmitter is qualified to IP-2 EQ requirements and operates in the same manner as the

original transmitter. Since the new transmitter is environmentally qualified, existing equipment qualification is maintained. The new transmitter was attached to the existing conduit and cable routing. No unreviewed safety question was involved.

SE-96-015-TM

FIRE DETECTOR TROUBLE ALARM

This jumper utilized a resistor attached across the positive and negative points on the terminal block associated with zone 3 fire detectors to unmask the trouble alarm on the Primary Auxiliary Building Fire Detection System. While the zone three detectors are out of service the jumper allowed trouble alarms to annunciate in Zones 1, 2, and 4. A fire watch was established in accordance with Technical Specifications. This jumper did not represent a reduction in the margin of safety contained in the Technical Specifications or their bases. No unreviewed safety question was involved.

SE-96-016-MD

HIGH PRESSURE FEEDWATER SAMPLE COOLING

This modification installed 1-1/2" diameter Cement Lined piping to provide cooling water for the high pressure feedwater (HPFW) sample coolers. It provided connections for future sample cooler addition and installed a drain line for relief valve and sample coolers. There were no safety related functions affected by this modification. The only possible failure mode introduced was overpressure of the sample cooler shell side. However, a relief valve was installed on the piping to provide protection for the sample coolers. The materials for the new installation were compatible and the change did not impact any system's design pressures, temperatures, flow rates, or other parameters. This modification does not involve any electrical work, is non EQ, has no impact on Class 1E equipment. No unreviewed safety question was involved.

SE-96-017-TM

STATION AIR TO GT-1 FIRE PROTECTION

For trouble shooting, a hose was connected to blow station air through fire protection nozzles of the Gas Turbine Generator GT-1. The affected portions of the Fire Protection System were out of service and isolated for this jumper. There is no safety related equipment in the area. The hose was removed before returning the system to service. No unreviewed safety question was involved.

SE-96-018-DE

REPLACEMENT OF FISCHER & PORTER FLOW METERS BY BROOKS FLOW METER

New Brooks flow meters were procured using the same specifications as the existing ones and the materials of the meters are compatible. The design specification of the replacement meters and the previous Fisher & Porter Flow meters are the same. Orientation and the installation for both are the same. The weight difference between the new and old meters was insignificant and the basic functions, performance and the design

conditions remain unchanged. Therefore, the newly installed meter is like and kind replacement. No unreviewed safety question was involved.

SE-96-019-DE

3/4" FIRE PROTECTION GATE VALVE REPLACEMENT

The newly installed gate valves were designed for this application and are essentially the identical to the previous valves. This change has no impact on the operability of the Fire Protection System nor does it impact the plant's mode of operation. It does not involve any Class 1E equipment nor impact the electrical system. If compensatory measures are required for testing they will be dictated by the Fire Protection Technical Specifications and the Fire Protection Program Plan. No unreviewed safety question was involved.

SE-96-021-TM

RCP SEAL RETURN LOW FLOW ALARM

The Reactor Coolant Pump (RCP) high/low #1 seal Return Flow Alarm is common to all RCP's. This jumper was used to adjust the setpoint for the alarm bistables for all RCP's from 0.91 GPM to 0.80 GPM. This setpoint change cleared alarm 22, unmasking the other active alarms and still remaining within the operational limits. No safety related function is involved with this setpoint change. The alarms being changed remained operable, no new failure modes were introduced, no margin of safety issues were presented. No unreviewed safety question was involved.

SE-96-022-TM

PROVIDE A WATER PRESSURE SOURCE FOR DESLUDGING PIPING BACK TO 13 WCT.

A hose was connected from the Unit 1 Nuclear Service Water hall hose connection to provide water for desludging waste collection piping. This jumper was continuously attended by personnel while in use in order to be immediately secured if any leakage was observed. There is no unreviewed safety question involved with this Jumper based on screening documents for previously performed Jumper 96-017. No unreviewed safety question was involved.

SE-96-023-DE and SE-96-030-DE

SWING CHECK VALVES REPLACEMENT

Swing check valves FW-38 and FW-39 were replaced. The replacements are equivalent to the original valves. Their materials meet or exceed requirements for the original installation. They are not located in an area that contains safety related equipment. The replacements did not impact the operability of any system. No unreviewed question was involved.

SE-96-024-MM, Rev.1

HOIST AT ELEVATION 95', NORTH STAIRS

This modification involved the installation of a new 2 ton capacity Jib Crane with electric hoist at elevation 95' of the Containment Building and the removal of the existing air-

tugger hoist. The installation process was performed utilizing relevant safety precautions and following detailed implementation procedures. The installation included new structural steel and reinforcement of existing steel, and new handrails to protect floor openings. A dedicated fire watch was required per the welding/burning/grinding permit. The new hoist has a larger capacity with a movable radial span of boom as compared to the previous rigid hoist installation. The new Jib and Hoist were seismically installed and no new failure mode introduced. The electric hoist did not impact the electrical system capacity, output or voltage. No unreviewed safety question was involved.

SE-96-026-MM

REMOVE THERMOWELL & TEMPERATURE INDICATOR

Thermowell TW-3300 and Temperature Indicator TI-3300 were removed from the containment recirculation sump pump discharge line service since they served no safety function, were not being used, and the thermowell was leaking. Pump flow was not affected since the threadolet was plugged with a class A pipe plug after the removal of the thermowell. These components were mechanical with no impact on any electrical equipment. The Thermowell and Temperature Indicator were not used for any plant modes of operation. No new failure mode was introduced. No unreviewed safety question was involved.

SE-96-028-DE

REPLACEMENT OF NITROGEN VALVE

Nitrogen System Valve SGN-18 was replaced. The new valve will provide the same functions and operate in the same manner as the previous valve. The stresses due to the new valve are within allowable stresses. No unreviewed safety question was involved.

SE-96-029-TM

FLOW INTEGRATOR

This jumper provided the Control Room operators with a running total of the amount of water that is diverted from the Reactor Coolant System (RCS) via LCV-112A during normal operations and when draining the RCS. It does not affect the safety related function of the Chemical and Volume Control system or the letdown flow indication loop. The existing plant equipment and controls are not affected by this jumper. The margin of safety was not reduced. No unreviewed safety question was involved.

SE-96-031-DE

FEEDWATER VALVE REPLACEMENTS

Valves FW-42 and FW-43 were replaced. The replacements are equivalent to the original valves. Their materials meet or exceed requirements for the original installation. They are not located in an area that contains safety related equipment. The replacements did not impact the operability of any system. No unreviewed question was involved.

SE-96-032-DE

CHECK VALVE REPLACEMENT

Check valve LW-211, located in the discharge of the cask wash pit sump pump, was replaced. The replacement is equivalent to the original valve. Its materials meet or exceed requirements for the original installation. The valve is not Class A and is not located in an area that contains safety related equipment. The replacement did not impact the operability of any system. No unreviewed question was involved.

SE-96-033-DE

TEFLON PACKING IN GAS SYSTEM APPLICATION

Grafoil packing in valves in the nitrogen and hydrogen systems were replaced with Teflon. The material change to Teflon packing is acceptable for Gas System valves located in areas outside the high radiation fields as defined in the EQ program plan. This new packing should retain its material properties. The Teflon packing will operate in the same manner and provide the same functions as the original design. No unreviewed safety question was involved.

SE-96-035-DE, Rev. 1

MAIN STEAM TRAP HEADER PIPE SECTION REPLACEMENT

A section of piping in the main steam trap and extraction steam trap header was replaced. The new Chrome-moly steel piping used for Main Steam Trap and Extraction Steam Trap pipe replacement has a greater resistance to erosion and corrosion compared to the old carbon steel piping that it replaced. This new piping will not affect any system's design since all new materials are compatible with previous installations and their environments. Existing supports were used for the new piping since the weight of the new piping was the same as the old piping. The piping is located in the Auxiliary Feedwater Building and in the Turbine Building. It is located in a high energy system; however, this change did not create a new high energy line break that was not previously analyzed. No unreviewed safety question was involved.

SE-96-036-DE

1/4" INSTRUMENT AIR SYSTEM VALVE REPLACEMENT

The new Instrument Air system valve will provide the same function and operate in the same manner as the previous valve. Materials of the new valve are acceptable. Installation was seismically restrained via supports repaired or replaced and installed according to the Con Edison drawing for typical tubing supports. The replacement valve pressure rating is higher than the IA system design specification and does not create a new "high energy" line break. System parameters were not affected. No unreviewed safety question was involved.

SE-96-037-TR

ENGINEERED WELDED PATCH PLATE REPAIRS AND WELD-OVERLAY REPAIRS FOR NON-CLASS PIPING BELOW 600 DEGREES F, IN NON SAFETY RELATED AREAS

Approved Engineered Welded Patch Plate repairs are for Conventional Plant non-class piping below 600 degrees F. This is a temporary repair of carbon steel P1 piping that has been evaluated by the Erosion and Corrosion program to have a below minimum wall thickness. The Engineered Patch repair is to be used for piping sizes that are not readily available, and designed to withstand full pressure of the contained fluid in the pipe. The patch will be compatible with the existing piping and restore the function and design capability of the pipe. The patch will be replaced with a code repair at the next scheduled refueling outage. The repair methodologies assure Welded Patch Plate repairs allow the pipes to function safely and reliably and will not impact any safety related systems function defined in any Technical Specification. No unreviewed safety question was involved.

JUMPER 96-038 (REUSE of SE-93-375-TM)

DEFEAT OF THE TURBINE RUNBACK INPUT FROM ROD N-9

This Jumper was used to defeat the Turbine Runback input from rod L-3. This is a reuse of a 1993 jumper and Safety Evaluation for an event similar to the individual rod position indication (IRPI) for rod L-3 operation of which has caused spurious runbacks. No unreviewed safety question was involved.

SE-96-039-TM

ALTERNATE CITY WATER SUPPLY

This jumper was used to provide city water during maintenance. The hose is designed for the pressures expected with the City Water System. A hose failure would cause a loss of city water to the section being supplied by this jumper. However, this would occur in a well traveled area and would be discovered and repaired quickly by the operator. This short duration loss would have no safety significance. The change would not impact the operability of any system or equipment during any mode of operation. No unreviewed safety question was involved.

SE-96-041-TR

**REACTOR COOLANT PUMP MOTORS 21 AND 24 LOWER THRUST BEARING RTDS
TEMPORARY BACKUP OIL SEAL**

A temporary backup seal in addition to the existing Resistance Temperature Detector (RTD) Oil Seal was installed on Reactor Coolant Pump Motors 21 and 24 Lower Thrust Bearing. The modified seal was designed for service based on the design criteria for the Reactor Coolant Pump Motor Oil Reservoir including its environment. It will reduce the potential for Reactor Coolant Pump Motor oil leakage from the Lower Thrust Bearing. Operability of the associated safety related equipment was not affected. No unreviewed safety question was involved.

SE-96-042-DE

REPLACE A SECTION OF THE 25 EXTRACTION LINE

A section of the existing carbon steel extraction line between the Moisture Separator Tank and the 28" Extraction Header was replaced. The chrome-moly piping meets the design requirements of the existing carbon steel piping and is more resistant to flow accelerated corrosion than carbon steel. The heavier replacement piping is adequately supported by the 28" Extraction Header and the Moisture Separator Tank (both supported by the structural steel). There was no impact to the operability of the system. No unreviewed safety question was involved.

SE-96-043-TM

INSTALL JUMPER HOSE FOR THE CONVENTIONAL CLOSED CYCLE HEAT EXCHANGER

This hose provided City Water to cool the Conventional Closed Cycle Heat Exchanger with the non-essential Service Water System inoperable. Further, it permitted operation of a Condensate Pump with the Service Water isolated. No unreviewed safety question was involved.

SE-96-044-TM

INSTALL STAINLESS STEEL TUBING ON THE SCREENWASH PUMPS 21 AND 23 FROM THE MECHANICAL SEAL HOUSING TO A NEARBY DRAIN

Stainless Steel tubing was installed from the Mechanical Seal Housing for Screenwash Pumps 21 and 23, including a throttle valve to regulate flow through the seal, to a nearby drain. This increases the flow rate of city water for flushing the seal and improved operability of the Screenwash Pumps. There was no impact on safety related equipment. No unreviewed safety question was involved.

SE-96-046-DE

TURBINE CONTROL VALVE #1 STUD HOLE ALTERATION

Install a Helicoil in a stud hole for Turbine Control Valve #1 (PCV-5989). Valve operability and function are not affected. There is no impact on safety related equipment. No unreviewed safety question was involved.

SE-96-047-TM

JUMPER HOSES TO FACILITATE CALIBRATION OF THE REACTOR COOLANT PUMP SEAL RETURN FLOW (HIGH AND LOW) TRANSMITTER

This jumper installed hoses to facilitate calibration of the Reactor Coolant Pump Seal Return Flow (High and Low) Transmitters. A temporary hose was installed from the existing Primary Water system to valves C-35, C-38, C-42 and C-43 and the blank flange was removed, one Reactor Coolant Pump at a time. A temporary drain hose was installed from valves 245A, 245B, 245C and 245D in conjunction with the temporary Primary Water hose. After completion of the calibration of the Flow Transmitters the temporary hoses were removed. A Post Maintenance Test (PMT) ensured the integrity of the Reactor Coolant Pump Seal Return system. No unreviewed safety question was involved.

SE-96-049-EV

INCREASED THE ALLOWED CLOSING TIME FOR THE BYPASS FEEDWATER REGULATING VALVES

Increasing the allowed closing time for the Bypass Feedwater Regulating Valves from 8 seconds to 10 seconds was evaluated. DNB margin will not be decreased from the UFSAR value because of excess shutdown margin. No unreviewed safety question was involved.

SE-96-050-EV

EVALUATION OF THE PRESSURIZER RAPID COOLDOWN EVENT OF FEBRUARY 10, 1996

During a plant shutdown commencing February 9, 1996 to replace a leaking PORV, a rapid cooldown (relative high temperature difference between the primary coolant and the fluid in the Pressurizer) occurred in the Pressurizer. Westinghouse evaluated the thermal gradient experienced with regard to continued structural integrity of the Pressurizer. Two failure modes were evaluated (a fatigue assessment and a fracture assessment against the criteria of ASME Section XI). The fatigue assessment demonstrated that the resulting change in fatigue usage for the affected Pressurizer components is negligible for a single occurrence of a transient of this type. The fracture assessment demonstrated that this transient did not result in stress intensity factors of a magnitude required to cause initiation of a flaw. The comparison between fracture toughness at which crack initiation is likely to occur and the stress intensity factor distribution resulted in a margin of safety of at least two. No unreviewed safety question was involved.

SE-96-051-EV

EVALUATION OF CORE EXIT THERMOCOUPLE ANOMALY

This evaluation addresses eight Core Thermocouple pairs which could be potentially swapped. The impact of these potentially swapped thermocouple pairs would be that a temperature indicated for a specific Core location would represent a different Core location. These thermocouples are still providing valid inputs to calculate the representative Core Exit temperature (which is not dependent on a specific location). The potentially swapped thermocouples are each within the same train thereby maintaining Separation, Isolation and Redundancy requirements of the Core Exit Temperature Monitoring System. Operators were made aware of the potential swapped thermocouple pairs via Temporary Procedure changes to insure minimum operability requirement of 9 T/C's per quadrant and 4 T/C's per quadrant per channel are met. No unreviewed safety question was involved.

SE-96-053-TR

MOTOR GENERATOR SET 21 TEMPORARY REPAIR

During the repair of the Motor Generator Set 21, it was identified that the appropriate interference fit between the inboard generator ball bearing (inner race) and the rotor shaft could not be achieved due to the shaft being "undersized". A temporary repair was recommended to promptly restore the Motor Generator Set 21 to service. This temporary

repair consisted of an adhesive (Loctite 680) to secure the inner race of the bearing to the shaft. If the adhesive did not secure the inner race, the bearing would eventually fail. No change in the bearing location is involved, therefore there is no increase in the probability that a "missile" can be generated. Additionally, the expected failure mode can be identified through the increased surveillance of vibration data prior to bearing failure. No unreviewed safety question was involved.

SE-96-054-TM

CITY WATER JUMPER HOSE TO GENERATOR STATOR WATER COOLER

This jumper hose was used while the unit was shutdown and to provide City Water to cool the Generator Stator Water due to its pump flow created heat. A check valve was installed to prevent any backflow into the City Water System. All jumper material was compatible with existing materials and was routed so that it didn't impede personnel traffic. A jumper hose failure would result in a decrease in City Water System Header pressure and would be detected quickly because it is near the Nuclear Plant Operator's office. No unreviewed safety question was involved.

SE-96-055-TM

FLUSH THE STEAM GENERATOR INSTRUMENTATION TRANSMITTERS

A temporary hose was installed for flushing the Steam Generator Steam Flow, Feedwater Flow, Pressure and Level transmitters. The demineralized water is the same or better quality than what already exists in the Steam Generator. A temporary operating procedure was written to address the necessary transmitter alignments. This flushing process for a total of 48 transmitters was to clear all reference legs of any standing debris, thereby improving the operability of the transmitters. The flushing occurred with the reactor in cold shutdown and the Reactor Coolant System temperature less than 350F. Only one transmitter at a time was flushed. A minimal amount of time, two to three minutes, was used to accomplish the flushing. The flushing process was continuously manned in order to secure the demineralized water supply in case of a hose rupture. No unreviewed safety question was involved.

SE-96-056-DE

REPLACE OBSOLETE TRANSMITTERS

This was a like and in-kind replacement for obsolete pressure transmitters. Transmitters PT-1181, PT-1182, PT-1183 and PT-1184 are used to transmit the Main Feedwater Pressure signal to the plant computer. They do not perform any control function, safety function or mitigate the consequences of the design basis accident. The mechanical integrity of the transmitters are required during a postulated seismic event. The new Foxboro transmitters have been qualified to meet the requirements of IEEE 344-1975 and mounted in accordance with the manufacture's drawings and instructions. The installation meets the seismic requirements. No unreviewed safety question was involved.

SE-96-057-TR

INTERIM OPERATION WITH #91 CONOSEAL LEAK AND INSTALLATION OF A CATCH BASIN ON #91 CONOSEAL

A Safety Assessment for interim operation with a Conoseal leak was performed for a similar event in 1988. The conclusion of that Safety Assessment was that leakage of Reactor Coolant past the Conoseal gasket could not lead to a catastrophic failure of the Conoseal. Leakage through a Conoseal gasket is not considered to be a pressure boundary leak. The observed leakage is below the 10 gpm identified leakage limit of the Technical Specifications. Visual inspections of the Containment Fan Coolers and the Conoseal will ensure that potential boric acid accumulation did not degrade any safety equipment function. The installation of a catch basin around a Conoseal has been previously evaluated to be an acceptable means of preventing boric acid from coming in contact with the carbon steel surfaces of the Reactor Vessel Head and previously analyzed to be seismically acceptable. The catch basin could not come loose during a seismic event and will not adversely impact the seismic integrity of the Conoseal. No unreviewed safety question was involved.

SE-96-059-DE

REPLACE LIFT CHECK VALVE

Check valve 1C 36A was replaced with an equivalent check valve. The replacement valve materials meet or exceed those of the existing one and flow resistance changes are negligible. No unreviewed safety question was involved.

SE-96-060-EV

EVALUATION OF MILLSTONE'S NOTIFICATION OF 2/20/96 - NRC EVENT NUMBER 29999

The purpose of this analysis is to evaluate the applicability of Millstone's NRC event number 29999 to Indian Point No. 2. Millstone determined that its Unit 2 High Pressure Safety Injection Throttle Valves are susceptible to clogging during Containment Sump recirculation phase because the Sump Screen opening is greater than the valves' openings which could result in partial or complete loss of Emergency Core Cooling System flow. At Indian Point Unit No.2 the Recirculation Sump and the Containment Sump has two sets of screens to remove debris and particles. The first screen is a 1" x 4" floor grating covering the sumps. The second screen installed in each sump is #6 mesh screen (design screens were to remove particles greater than 0.25 inches diameter). There are 12 throttling valves involved for Indian Point Unit No.2 and all had internal openings exceeding the possible particle size that pass through the #6 mesh sump screens. It is concluded that the flow openings in the plants' throttle valves will not be affected by particles that pass thru the Recirculation Sump and the Containment Sump screens. Therefore, the events reported at Diablo Canyon and Millstone do not apply to Indian Point Unit No.2. No unreviewed safety question was involved.

SE-96-061-TM

BLANK FLANGES ON THE HYDROGEN RECOMBINER SUPPLY LINE

Two, four bolt blank flanges were installed on each open end left by spool piece removal on the hydrogen supply to the Hydrogen Recombiner. The blank flanges are in place when the Hydrogen Supply System is required to be deactivated by spool piece removal and removed when the System is required to be active. The Hydrogen Recombiners Operating Procedure SOP 10.9.1 controls installation and removal of the blank flanges. No unreviewed safety question was involved.

SE-96-062-DE

GASKET CHANGE SPENT FUEL PIT, BORIC ACID TRANSFER AND PRIMARY WATER PUMPS

The change in gasket material is recommended by the pump vendors. The gasket leachable chlorides are within the limits specified. No unreviewed safety question was involved.

SE-96-064-DE, Rev. 1

CHANGE STARWHEELS IN W-2 SWITCHES

This change is for W-2 switches used for local and remote of plant components. The white "textin" starwheel operating mechanism was changed to a white or black nylon starwheel. The white "textin" starwheels could fail in service. This change restores reliable operation of the associated control switches. No unreviewed safety question was involved.

SE-96-065-TR

TEMPORARY REPAIR TO THE MOISTURE SEPARATING TANKS A AND B MANWAYS

Using Leak Repair, the Moisture Separating Tanks A and B Manways located on elevation 15' of the Turbine Generator Building were temporarily repaired. The Manways operate in the same manner with the temporary repair and the material is compatible with the existing installation. No unreviewed safety question was involved.

SE-96-066-DE

REPLACEMENT GATE VALVES

Gate valves 1/2", 3/4" and 1" 800 pound class were replaced. The material of the new valves has been considered for compatibility with the existing installations and has been determined to be acceptable. This change does not impact nor is it impacted by the plant's mode of operation or any system parameter. No unreviewed safety question was involved.

SE-96-067-MD

CHARCOAL FILTER REMOVAL FROM CONTAINMENT FAN COOLER UNITS

This modification removes the HEPA Filters, the Charcoal Filters and Associated Fire Protection and Detection equipment from No.'s 21, 22, 23, 24 and 25 Containment Fan

Cooler units by either actual removal or retirement in place. This modification is based on WCAP-14542, "Evaluation of the Radiological Consequences from a Loss of Coolant Accident at Indian Point Nuclear Generating Station Unit No.2 Using NUREG-1465 Source Term Methodology". The result of the study demonstrated that off-site and Control Room dose limits are maintained within all regulatory limits without reliance on the HEPA and Charcoal filters which were part of the Containment Fan Cooler System. The containment Fan Cooler system safety function is the removal of heat and Iodine from the containment following a Design Basis Accident. Since Iodine removal is no longer needed, the HEPA filters that removed submicron particles before the charcoal filters can be removed in addition to the charcoal filters. The associated fire protection and detection equipment associated these filters can also be removed. This modification requires a change in the Fire Protection Plan and a license amendment. No unreviewed safety question was involved.

SE-96-068-MM

CONDENSER SEXTANT SAMPLING PUMP POWER SUPPLY

This modification replaced the existing power feeds to the Condensate Sampling Pumps and changed the power receptacles to GFCI type receptacles. The original pumps were replaced with larger capacity pumps to meet sampling requirements but the power circuits were not upgraded at the time. The result was excessive fuse failure and high wiring temperature. New wiring and breakers were installed and GFCI receptacles replaced the existing one to improve personnel safety. The installation is in the area of the Turbine Building which does not contain any safety related equipment. The pumps and power source are non-Class A. No unreviewed safety question was involved.

SE-96-069-TM

BACKUP PILOT WIRE RELAY

This jumper opened the Backup Pilot Wire Relay (87L2/345) to prevent erroneous operation of the 86BU until operational confidence in the relay could be restored through online testing. The Backup Pilot Wire Relay and the 86BU are shown in the UFSAR as being part of the "Turbine Trip Signals" and, subsequently, providing a "Unit Trip" signal input. The Backup Pilot Wire Relay is redundant with the Primary Pilot Wire Relay which remained closed and ready to respond to provide necessary plant protection while this jumper was in place. No unreviewed safety question was involved.

SE-96-070-TM

PILOT WIRE RELAY AMMETER TEST SWITCH CONTACT JUMPER

This jumper was placed across the Pilot Wire Relay Switch contacts to reduce the resistance and the probability of a spurious or incorrect Pilot Wire Relay Trip. This jumper was completely passive and did not alter the function of the relay. Similar relays throughout the Con Edison system have this same modification. No unreviewed safety question was involved.

SE-96-071-DE

CONTAINMENT HIGH RANGE PRESSURE TRANSMITTER

The Containment Pressure High Range pressure transmitter was replaced with a new transmitter that is EQ and seismically qualified for its plant configuration. The materials of the new transmitter are compatible with the existing one and will attach to the existing conduit and cable. There is no impact on the operation of safety related equipment. No unreviewed safety question was involved.

SE-96-072-DE

UH-747 VALVE REPLACEMENT

Valve UH-747 was replaced with one that operates in the same manner as the original valve. The replacement valve is mounted in the same non-seismic configuration as the original one and will not create a new high energy line break that has not been previously analyzed. The materials of the replacement valve are in accordance with design specifications. This valve does not impact safety related equipment or systems. No unreviewed safety question was involved.

SE-96-073-TM

CAP GAUGE CONNECTIONS

Gauge connections in the ignition oil supply were capped. The gauges had previously been isolated and were not used. There was no impact to any plant operational mode. There is no safety related equipment in the area. No unreviewed safety question was involved.

SE-96-076-DE

SERVICE WATER PUMP DISCHARGE EXPANSION JOINT REPLACEMENT

The replacement expansion joint for the Service Water Pump meets or exceeds the original design specification and the system design parameters. The replacement materials are compatible with the Service Water System and water quality. The replacement expansion joint was restrained in an identical manner as the original one and did not adversely impact the seismic qualifications of the piping system. It is within the boundary of the ISI/IST Program but does not require a change to the Program. No unreviewed safety question was involved.

SE-96-077-PR

USE OF AN AIR OPERATED PUMP TO FILL THE FUEL TRANSFER CAVITY FROM THE SPENT FUEL POOL

An air operated pump was installed and operated in the Fuel Storage Building for the purpose of filling the fuel transfer cavity from the spent fuel pool. The equipment, including the pump and its power source, were non-safety related, but the pump interfaced with the spent fuel pool and the water within the pool. Temporary operating instructions included precautions and limitations to insure the operation of the air pump did not adversely impact the safety function of the spent fuel pool cooling system. Pool

water temperature and level instrumentation would have warned the operator of an impending unsafe condition. The air pump was secured to prevent the possibility of its becoming a missile during a seismic event. Upon completion of the filling operation, the air pump and its temporary connections were removed to preclude loss of pool water due to siphon effect. The actions undertaken constituted a temporary operation that involved neither the addition of new equipment nor the deletion of existing equipment. There was no reduction in any margin of safety. No unreviewed safety question was involved.

SE-96-079-DE

UPGRADE CONDENSATE DRAIN

The bronze valve and seat on a condensate drain was replaced with a stainless steel valve and seat. The effect of the replacement was to improve the reliability of the condensate drain valve function by changing from a bronze valve and seat to a stainless steel valve and seat. This operation involved only a change in component material, and the new material provides improved reliability through increased corrosion resistance to the chemicals in the condensate, most notably ammonia. No systems, procedures, or design parameters were affected. No unreviewed safety question was involved.

SE-96-082-DE

REPLACEMENT OF A CHECK VALVE WITH A NON-IDENTICAL VALVE

Check valve UH-3-211 was replaced. It does not react with any safety-related equipment or system. The change did not affect any document considered a part of the licensing basis, and no margin of safety defined in the Technical Specifications was reduced. The new valve is non-EQ and, although it is 2.8 pounds heavier than the valve it replaces, can be supported by the existing pipe hangers. The valve is located in a high-energy system, but does not create a new high-energy line break possibility. No unreviewed safety question was involved.

SE-96-083-DE

REPLACEMENT OF A CHECK VALVE WITH A NON-IDENTICAL VALVE

Check valve UH-4-211 was replaced. It does not react with any safety-related equipment or system. The change did not affect any document considered a part of the licensing basis, and no margin of safety defined in the Technical Specifications was reduced. The new valve is non-EQ and, although it is 2.8 pounds heavier than the valve it replaces, can be supported by the existing pipe hangers. The valve is located in a high-energy system, but does not create a new high-energy line break possibility. No unreviewed safety question was involved.

SE-96-086-DE

REPLACEMENT OF OBSOLETE DRAIN VALVE

The Smith 3/4" drain valve (MS-109-40) used to vent or drain low pressure dump piping was replaced with a Vogt 3/4" globe stop valve. The Vogt valve meets or exceeds the original valve design specifications, and no new failure modes were introduced by

replacing the old valve. The valve is not electrically operated, is not used for the operation of critical plant equipment, is not impacted by external events, and does not impact the plant's mode of operation. No new high-energy lines were created by the replacement of the Smith valve with the Vogt valve. No unreviewed safety question was involved.

SE-96-089-DE

REPLACE CHESTERTON 134-S SEALS WITH 155 SEALS FOR RESIDUAL HEAT REMOVAL (RHR) PUMP APPLICATIONS

Residual heat removal pumps underwent a change from Chesterton 134-S seals to 155 seals. The change does not impact any parameters of the system, including seal leakage rate, which remains within the values described in the UFSAR. No new failure modes were introduced by the change, nor does it impact -- nor is it impacted by -- the plant's mode of operation. The only change is to prolong the life of the mechanical seals so that changing the seals is required less often. The basic material change in these seals is found in the stationary and rotary face materials. In the old seal, wear was taken by carbon; in the new seal, the wear material is Duplex Carbide, which is more suited for a borated-water environment. The new seal is a little lighter than the old, but in either case the seal weight has little effect on the much greater overall weight of the pump and is negligible in terms of seismic calculations or forces. This seal replacement was a simple upgrade of an existing component. No unreviewed safety question was involved.

SE-96-090-EV

REVISION OF UFSAR TO REDUCE STATED FLOW RATES OF GAS STRIPPER FEED PUMPS

The three gas stripper feed pumps (GSFPs) were originally used to pump the hold-up tank's contents to the Boron Recycle System and Gas Stripper Package. The design capacity of the GSFPs was selected to match the Gas Stripper Package and Boric Acid Evaporator processing rate. The original Westinghouse specification called for a capacity of 7.5 gpm for the 21 and 23 pumps and a capacity of 12.5 gpm for the 22 GSFP pump. However, the existing UFSAR as well as the original UFSAR listed the capacity of each of the three pumps as 12.5 gpm. Field inspection shows the 21 and 23 pumps have a 7.5 gpm capacity. The 22 GSFP was designed and installed as a 12.5 gpm pump. The UFSAR revision to reflect the correct pump capacities is editorial in nature and has no effect on plant operation. Furthermore, the Boron Recycle System and Gas Strippers are retired and the GSFPs are now used for transferring water from hold-up tanks in Unit 2 to waste collection tanks in Unit 1. Therefore, the pump size is not critical and has no safety impact on any system or equipment during any mode of operation. No unreviewed safety question was involved.

SE-96-091-TR

TEMPORARY REPAIR TO MAINTENANCE AND OUTAGE BUILDING (MOB) SEWAGE LINE

A clamp was used to make a temporary repair to a MOB sewage line. It is located in the Unit 1 Superheater Building. System operation was not changed. There is no safety related equipment in the area. No unreviewed question was involved.

SE-96-092-MM

UPGRADING OF SUBSTATION 'A' BY REPLACING 480 VAC EXPOSED BUS AND FUSIBLE DISCONNECTS

The 480 VAC exposed bus and fusible disconnects in Substation 'A', which supplies power to the fire pump house heaters and other auxiliary loads, were replaced with a totally-enclosed bus and switchboard. The permanent load is now connected via breakers, which give the same degree of protection as fuses. Temporary connections are made through fusible disconnect switches, so flexibility is the same as previously provided. Vital cable and cable trays were not impacted, because new cables from the switchboard to the local splice boxes or disconnect switches were installed locally in the substation area. The new equipment does not alter the rating or performance of the power feed. This change of equipment reflects only an upgrading of an existing system, and the new components do not contain any environmentally hazardous material. No unreviewed safety question was involved.

SE-96-093-MD

ADDITION OF A TIME-DELAY RELAY TO THE OPERATING CIRCUITRY FOR VALVE FCV-625

A time delay relay was added to the control circuitry for valve FCV-625 to delay the high-flow output signal of FIC-625 for 10 seconds or less, so that FCV-625 does not close spuriously on the surge wave caused by the "start" or "stop" of a component cooling water pump. Prior to the installation of this time delay, it was necessary for operating personnel to hold the control switch for FCV-625 in the open position to prevent the valve from closing on the flow fluctuations caused by starting or stopping the component cooling water pumps. The relay, which was installed to class 1E and seismic requirements, resolves the "operator work around" issue raised during the 1995 INPO walkdown. The electrical load added by the relay is small and within the capacity of MCC 26A and the control circuit for FCV-625, and emergency diesel loading remains acceptable. The time delay still permits the prompt closure of FCV-625 in the event of a reactor coolant pump thermal barrier rupture and will not affect the containment isolation signal to the valve. No unreviewed safety question was involved.

SE-96-094-DE

CHANGE TYPE OF PRESSURE SWITCH IN EMERGENCY DIESEL GENERATOR WATER JACKETS

The double-contact pressure switches in the EDG jackets were replaced by single-contact UE J6 Model 156 switches. The requirement for the second contact on the old switch no longer existed, so the single-contact replacements have no negative impact on operability. The change to the switches does not affect plant operation or documents considered a part of the licensing basis. No unreviewed safety question was involved.

SE-96-095-DE

REPLACE A GAUGE AND A VALVE IN THE NITROGEN SYSTEM

The nitrogen system has a design pressure of 2500 psi. The new gauge (PI-1075) is rated for 0-3000 psi, and it replaces a gauge rated at 0-5000 psi. Since the normal nitrogen pressure falls in the middle third of the new gauge range, the new gauge will give more accurate readings than the old. The new valve (1434) is rated at 6000 psi, and it replaces an old valve whose rating was 1500 psi. In addition, the new valve uses a compression (Swagelok) fitting, which is more desirable for tube fitting installations than the old screwed-connecting valve. All materials of the new components are compatible with the remainder of the installation. No unreviewed safety question was involved.

SE-96-096-MD

INSTALL A VIDEO CAPTURE SYSTEM IN THE EXISTING PERIMETER VIDEO SYSTEM

A video capture system was installed to enhance the Central Alarm Station (CAS) and Secondary Alarm Station (SAS) operators' capability to assess perimeter intrusion alarms via the existing perimeter video cameras. The capture system provides video playback of an alarmed zone before, during, and after an alarm is received. In addition, the new system has capability for zooming, negative imaging, and storing and recalling alarm events while monitoring a live video inset on the screen. The equipment for the capture system is neither connected to nor located in areas that have any safety-related equipment, and it is not connected to any system or equipment used to operate the plant. The equipment is powered by non-1E circuits that are backed up by the Security Diesel, and its associated cabling is not in any tray system and therefore does not impact the plant's cable separations design. No unreviewed safety questions were involved.

SE-96-097-MM

INSTALL "HIGH" TEMPERATURE ALARM FOR REFUELING WATER STORAGE TANK (RWST)

The function of an existing dual alarm bistable that was used only to generate a "LOW" temperature alarm for the RWST has been changed so the bistable also is used to provide a "HIGH" temperature alarm. UFSAR requirements for RWST temperature include a high-temperature limit of 100 degrees F. The alarm set point for high temperature has been set at 95 $-3/+0$ degrees F. This alarm will alert the operator when the upper temperature limit is approached, and the operator will take appropriate actions as required.

by the operating procedures. The cabling was run in existing trays in the Cable Spreading Room, so existing separation was maintained. No unreviewed safety question was involved.

SE-96-099-MD, Rev. 1

REMOVAL OF AIR COMPRESSORS INTERLOCK FROM PCV-1140 CONTROLS

The interlock between air compressors and valve PCV-1140 was removed. The original intent of the interlock was to prevent opening of PCV-1140 when there was no compressor available to supply backup air to the weld channel pressurization system (WCPS). The status of PCV-1140 is governed by the pressure sensed by PC-1167-S. The valve opens on loss of pressure, allowing WCPS to be pressurized by an emergency make-up line from the Station Air System, which is now normally fed by Centac compressors. Lack of the interlock does not affect the fail-safe status of valve PCV-1140; with the valve open, existing manual and check valves upstream and downstream will provide isolation capability for the instrument air system to protect it from any backflow into the station air system. The removal of the interlock has no effect on the operation of the present system. No unreviewed safety question was involved.

SE-96-100-TR

TEMPORARY REPAIR TO TRASH PIT DISCHARGE PIPE

The failed 12" corrugated-metal drainage pipe in the trash pit at the north end of the Unit 2 dock was repaired by inserting 10" PVC pipe through it. The old pipe had physically separated, causing water to leach into the surrounding earth and undermine the soil. Washwater from traveling water screens drains into the trash pit, where it then flows through the drainage pipe into the river. The insertion of the PVC pipe into the failed metal pipe was an effective temporary repair. No unreviewed safety question was involved.

SE-96-103-GM

INSTALL CABLING FOR COMPUTER LOCAL AREA NETWORKS (LANs)

Cabling was installed throughout office and administrative areas of Units 1 and 2 for the purpose of connecting stand-alone computer systems into LANs. This modification was issued as a generic mod to facilitate rapid installation by allowing portions of the job to be completed as the materials, locations, and construction and engineering schedules permitted. Fire protection and other considerations were not addressed within this generic modification; rather, they were treated in the design evaluations of the specific applications. No unreviewed safety question was involved.

SE-96-104-TM

ALTERNATE PATH FOR SPHERE FOUNDATION SUMP PUMP DISCHARGE

A hose and fittings were installed to temporarily redirect the discharges from the Sphere Foundation Sump Pumps. The change provided an alternate path for releases to the river. A break in the hose would not have resulted in an unmonitored release since the spillage would have been collected. A radiation monitor is provided for effluent activity. Monitoring of releases was not affected. Releases were in accordance with liquid waste release procedures. No unreviewed question was involved.

SE-96-105-MD

INSTALLATION OF A HOT WATER SYSTEM IN THE WATER TREATMENT PLANT (WTP)

A hot water system was installed in the caustic regeneration system of the WTP. The hot water system is located in the Superheater Building of Unit 1. The equipment provides a back-up or alternative means of heating the dilution water for the regenerant solution and slow rinse water used during regeneration of the anion resins in the anion exchangers and mixed-bed demineralizers when the House Service Boiler is shut down or in long-term lay-up. This redundant hot water system does not impact other systems, and its materials are compatible with the pre-existing installation. No emergency diesel generator or station battery Loads are involved, and the new cables for the heater were routed in new conduits, not with cables from other systems. No unreviewed safety question was involved.

SE-96-106-TM

TEMPORARILY CONNECT PRIMARY WATER TO WASTE HOLDUP TANK

The waste holdup tank was desludged to reduce radiation fields for ALARA purposes. A hose was temporarily connected to supply primary water to the desludging equipment. No safety related system or equipment was affected by the hose connection. No unreviewed safety question was involved.

SE-96-107-DE

REPLACE STATION AIR VALVE

Station Air valve SA-860 was replaced. The new valve provides the same functions as the one it replaced and is the same size and material; operability of the system was not affected. The change has no potential interaction with safety related equipment. No unreviewed safety question was involved.

SE-96-108-TM

TEMPORARY BATTERY CHARGER

Battery bank 12 was replaced. A temporary charger powered from a non-safety related source was used to initially bring the new batteries up to full charge prior to load testing and placing them in service. Properly sized cables and isolation devices were used. Non-safety related support facilities equipment was involved. No safety-related systems or functions were affected. No unreviewed safety question was involved.

SE-96-109-DE

REPLACE SERVICE WATER REGULATORS

The circulating water pump bearings and packing are lubricated by water. To facilitate use of water from the service water pumps, with city water as a backup, the service water regulators were replaced with a higher pressure model. This change conserves city water and improves operability of the system. There is no impact during abnormal or accident conditions. No unreviewed safety question was involved.

SE-96-110-TM

A TEMPORARY HOSE WAS USED TO DIRECT SUMP TANK EFFLUENT TO SUMP

A 1" hose was connected to the drain of the chemical systems building sump tank, to provide a path to the sump, which is pumped to the waste collection tanks. This temporary change was in effect to allow repairs to the tank's level instruments, alarms, and pumps. The sump tank collects drains from the chemical systems building floor drains above el. 33', and effluent from filter back-wash. The tank has no safety-related function. No unreviewed safety question was involved.

SE-96-111-TM

SUMP TANK INSTRUMENT LINES WERE FLUSHED

The level instrumentation lines for the Chemical Systems Building Sump Tank were flushed, with the tank drained. The operation of the plant was not impacted, and no safety-related equipment is located in the area. No unreviewed safety question was involved.

SE-96-112-DE

REPLACE REHEATER DRAIN SOLENOID VALVE

Solenoid valve SOV-1324 is used to direct the drain from reheater 21 to feedwater heaters. The original valve was replaced with a valve having the same design characteristics. The valve and piping are not class A or seismic. The valve does not affect systems that interact with equipment or systems used for safe shutdown during normal, abnormal, or accident conditions. No unreviewed safety question was involved.

SE-96-113-MD Rev 1

ADD TURBINE LUBE OIL AND WATER SEPARATORS

New oil and water separators were installed at the discharges of the existing oil centrifuge units. The new separators were installed to preclude oil from being discharged to the river. This system is not safety related and does not impact any safety related equipment. No unreviewed safety question was involved.

SE-96-114-DE

REPLACE VALVE FLANGE GASKET

A flange gasket in valve LCV-1158 was replaced by a gasket of a different material. The new gasket is compatible with the existing installation, and the system's design pressures,

temperatures, and other parameters were not impacted. No unreviewed safety question was involved.

SE-96-116-DE

REPLACE OBSOLETE TURBINE-GENERATOR RELAY

The relay that starts the turbine-generator emergency oil pump was replaced. The replacement has the same characteristics as the original. It is not seismic or class 1E and does not affect systems that interact with the equipment or system used for safe shutdown during normal, abnormal or accident conditions. No unreviewed safety question was involved.

SE-96-117-DE

REPLACE OBSOLETE MOISTURE SEPARATOR REHEATER (MSR) REHEATER DRAIN TANK LEVEL TRANSMITTERS

Obsolete MSR drain tank level transmitters were replaced. They do not perform any safety function, their signals are not used for any reactor protection circuit, and they are not required to mitigate the consequences of a design basis accident. No unreviewed safety question was involved.

SE-96-118-PR

PORTABLE DEMINERALIZER USE FOR UNIT 1 SPENT FUEL POOL

A portable, skid-mounted demineralizer was temporarily used to purify the water in the Unit 1 spent fuel pool. The demineralizer was placed next to the pool, and used minimal lengths of hose to connect to the pool. The pool water was maintained at the normal level. No system or equipment required for accident mitigation was affected. No unreviewed safety question was involved.

SE-96-119-DE

REPLACE MAIN STEAM TRAP (MST) OUTLET VALVE

The outlet stop valve for steam trap MST-32 was replaced. This steam trap removes condensate from the line that supplies steam to the priming ejectors. The new valve is of steel construction, identical to the valve it replaced. The plant mode of operation and plant parameters were not impacted. No unreviewed safety question was involved.

SE-96-121-DE

REPLACE ACCUMULATOR PRESSURE TRANSMITTERS

Obsolete transmitters for accumulator pressure were replaced. The new transmitters are functionally identical to those they replace, and have been qualified to meet the requirements of IEEE-323 and IEEE-344. They are classified as Class 1E, but do not initiate any automatic safety function. They are designed for the LOCA environment (inclusive of sprays and radiation) and for the normal containment atmosphere. EQ qualification is not required. They are seismically qualified. No unreviewed safety question was involved.

SE-96-123-EV

VACUUM BREAKERS ON UNIT 1 WASTE COLLECTION TANKS

The absence of vacuum breakers on the Unit 1 waste collection tanks was evaluated. The tanks receive and store liquid wastes from the Unit 2 waste holdup tank, along with liquid wastes from Unit 1. They are not Class A or seismic. Any gases that may collect in the tanks are vented and exhausted through the Unit 1 stack, which is monitored for radioactivity releases. No unreviewed safety question was involved.

SE-96-124-TM

PROVIDE WATER SOURCE FOR HYDROTEST RIG

Condensate was provided for operation of the hydrotest rig to test a main steam trap. A hose was connected to a 1/4" drain valve from the condensate system. Flow was minimal (less than 1 gpm). The valve has no safety related function. Operation of the condensate storage tank was not affected. No unreviewed safety question was involved.

SE-96-125-DE

REPLACE MAIN STEAM TRAP (MST) DRAIN VALVE

The strainer drain valve for MST-62 was replaced. This steam trap removes condensate from the line that supplies steam to the steam jet air ejectors. The new valve materials conform to or exceed the original design specifications. The valve does not affect systems during normal, abnormal or accident conditions. No unreviewed safety question was involved.

SE-96-126-EV

GROUND DETECTION TEST EQUIPMENT

Occasionally grounds develop on one of the ungrounded battery systems, and must be found. New technology for finding grounds has been evaluated. This technology is also useful for validating a fuse or breaker feeding a particular load, prior to opening it. A small transmitter is connected to the circuit under test. It draws short burst of audio-frequency current from the circuit. A hand-held probe is used to detect the resulting magnetic field surrounding the conductor that is supplying power to the transmitter. The additional loading is small and within the capability of the circuit under test. The frequency is outside the range that would affect plant instrumentation or relays. No new failure modes are introduced. No unreviewed safety question was involved.

SE-96-127-MM, Rev. 1

EMERGENCY DIESEL GENERATOR IMPROVEMENTS

Emergency diesel generator improvements consist of:

- installing alternate spare water jacket pressure switches,
- wiring spare pressure contacts to provide redundancy for starting the crankcase exhausters,
- installing interposing relays in the field flashing circuit,
- installing pressure test connections near the jacket pressure switches, and
- replacing the gauge panel shock mounts.

Relays and other components were seismically installed. The increased electrical load is acceptable. No safety function was altered by these changes, however, reliability is increased. No new failure modes were introduced. No unreviewed safety question was involved.

SE-96-128-MM

REMOVE STEAM GENERATOR BLOWDOWN SAMPLE VALVES

The steam generator blowdown sample valves, previously retired in place, were removed. Their indicating lights in the central control room were disabled. This change reduces the challenges to the operability of containment isolation valves for steam generator blowdown and blowdown sampling. The removed equipment had no system or safety function. Existing 1E isolation devices were not altered. No unreviewed safety question was involved.

SE-96-129-DE

REPLACE CHECK VALVE IN INTEGRATED LIQUID WASTE SYSTEM

Check valve SA-481 in the integrated liquid waste system was replaced. The replacement is an equivalent valve, of materials that meet or exceed those of the replaced valve. The replacement did not impact the operability of any system. No unreviewed safety question was involved.

SE-96-130-PR

TEST RIVER WATER PUMP AUTO-START

The auto-start feature of the river water service pumps was tested. To minimize their temperature transients, the vacuum deaerator and the turbine hall closed cycle cooling system were cooled by city water. Radiation monitor R-59 (which monitors the house service boiler condensate return) was temporarily removed from service and samples were taken periodically. The pumps do not provide an accident mitigation function. With their cooling loads provided by other means or removed from service, the failure of a pump to start would not result in loss of any normal function. No unreviewed safety question was involved.

SE-96-131-DE

REPLACE ISOPHASE BUS DUCT C PHASE FAN # 25 RETURN AIR LOW FLOW SWITCH (FIC-5572-IS)

The newly installed Return Air Flow Switch operates in the same manner as the original switch. The new switch is equivalent to the previous switch and will not change the electrical system. It is located in the Turbine-Generator Building 36' elevation on the southeast side in a nonseismic area where it will not be affected by an external event. The switch replacement will not put the plant in any configuration requiring compensatory measures to ensure compliance with regulatory requirements. No unreviewed safety question was involved.

SE-96-132-MM, Rev. 2

REPLACE INDEPENDENT ELECTRIC OVERSPEED PROTECTION SYSTEM (IEOPS)

This modification, which performs turbine over-speed protection, replaced existing obsolete Glen Controls IEOPS instrument system with instruments manufactured by LCC company. The new LCC instrumentation system is more reliable and prevents inadvertent failure trips. It is non-class A, non-seismic, and non-1E. It has a similar 2/3 logic actuation, except that the logic relays will energize to trip. The failure of a logic relay to energize is a new failure mode, but this is acceptable because credit for the IEOPS is no longer taken in the Updated Final Safety Analysis Report. The new Lovejoy system is isolated from instrument bus and DC bus power supplies by new fuses which are seismically qualified in the F9 rack. Loss of power or blown fuse are brought to the attention of the central control room operator via the existing category alarm. There is no increase in consequences of equipment malfunctions previously. No unreviewed safety question was involved.

SE-96-133-TM

PROVIDE TEMPORARY POWER TO WATER JET CLEANING RIG

Weld receptacle 11NS provided a power supply to a 7 ½ HP Water Jet Cleaning equipment. No new failure modes were added. The Jumper had no effect on the electrical system capacity, or output voltage. Two fire doors were blocked open on 33 ft Nuclear Service Building when the power cord to the Water Jet Cleaning equipment was connected to the weld receptacle. The work crew manned a fire watch while the doors were open. When work was not in progress and when work was completed the power cord was unplugged and removed from interference with the fire doors. No instrumentation or plant structures were affected. No unreviewed safety question was involved.

SE-96-134-MD

CONTROL ROOM HVAC MODIFICATION

This modification installed indication lights for the control room ventilation system backup fan in the control room. The indicating lights were installed to class 1E and seismic requirements and the Electrical Projects & Programs Section was informed of the

load. During this modification the air lines were cut and capped and the solenoids were retired in place for six Unit #1 dampers which are no longer used and this duct section is retired. Also the wires for dampers D-5A and D-5B on fans K-1 and K-2 were disconnected, air motors removed and the air lines capped. An 18" manual lever for the damper control was added. The existing function of the system was not changed and there is no impact on any previous accident analysis. No unreviewed safety question was involved.

SE-96-135-PR

CALCULATION AND RECORDING OF RADIOACTIVE GASEOUS RELEASE FROM A PATHWAY NOT NORMALLY UTILIZED FOR EFFLUENT RELEASES

Temporary procedure change to SOP 5.2.4, "Calculation and Recording of Radioactive Gaseous Release" was used to document the release of NIST traceable gas standards, Xe-133 and Kr-85, as effluents during the calibration of RE-101. The release of these gas standards through this pathway which is normally not utilized as a release pathway for plant activity nor monitored by the Plant Vent Effluent Radiation Monitor, but is in accordance with the ODCM, did not contribute any measurable dose at the site boundary. It did not alter the methodology for calculating or recording of radioactive gaseous releases. No unreviewed safety question was involved.

SE-96-136-TM

WATER/OIL SEPARATORS

This change involved the installation of Water and Oil Separators at various locations throughout the Plant. The separators take water and condensate which potentially could be contaminated with oil and allow this liquid to be discharged to the river with no oil content. The separators are constructed of either fiberglass or metal. All piping to the separators and then to drain are either threaded steel piping or PVC. This change does not have any effect related to metal interactions, radiation exposure, corrosion or paint and protective coatings nor any impact to the operability of any system. The separators are installed on existing drain lines with previously installed isolation valves and are checked during normal daily rounds to verify that a release of oil is not taking place. No unreviewed safety question was involved.

SE-96-138-TM

FUEL HANDLING FLOOR DURALINE FEED

The newly installed Fuel Handling Floor Duraline Feed is properly protected against electrical shorts or grounds by a fused disconnect switch, a breaker, and the internal circuit protectors on the Duraline itself. The cable used is properly sized and manufactured to be compatible with the existing electrical system components, retains electrical system redundancy and adds more levels of protection. This change does not affect any Unit 2 bus, does not impact the emergency diesel generators or station batteries, does not add any cable routing. No unreviewed safety question was involved.

SE-96-139-TM

FIRE DIESEL ALTERNATE FEED

This jumper provided an alternate power supply to the Class FP Diesel Fire Pump Battery Charger and the Fire Water Tank Heater and Pump during renovation of Substation A. The original power supply (Substation A) is non-safety related. The Class FP equipment has no safety related functions but are provided for the protection of plant safety features in the event of a fire. The only failure mode was that the feed or cable from the VC Substation fail. This is no different than the failure of the original feed. The jumper did not increase the consequences of previously evaluated fires, and there was no reduction in the margin of safety contained in the Technical Specification or their bases. No unreviewed safety question was involved.

SE-96-140-DE

REPLACE LEAKING FLOW INDICATOR

A leaking sight glass in the main turbine-generator oil system was replaced. The new model sight glass performs identically to the old model. Material of the new sight flow indicator is 316 stainless steel which is compatible with the carbon steel piping of the rest of the system and the oil. Change in weight from 12.5 to 17 pounds did not impact the Bowser piping. This change did not impact any system's design pressures, temperatures, flow rates or other parameters. No unreviewed safety question was involved.

SE-96-142-PR

IP-HYDROSTATIC TEST REQUIREMENTS FOR NON-CLASS PIPING IN THE PLANT SECONDARY SYSTEMS THAT IS COVERED BY B31.1 CODES

The purpose of this procedural change is to state and identify the code and rules that the plant will follow to pressure test non-class, non-boiler external piping after repairs or modifications are made on the system. Code year 1992 of B31.1 Power Piping code forms the basis for this procedural change. There is no safety related function since only non class A piping is associated with this procedure. There is a physical tie to Class A piping at some physical boundaries such as a pipe specification break point. However, the isolating valve provides functional separation that will insure separation of the system. Margins of safety are not adversely affected by use of this procedure. No unreviewed safety question was involved.

SE-96-143-MM

UPGRADE COMMAND POST EXTENSION BUILDING ELECTRICAL SERVICES

This modification replaced a 100 A disconnect safety switch to enhance the Command Post Extension Building's equipment power supplies. The new switch was mounted in the same locations (southwall of the Command Post Extension Building) as the previous switch and is the same Type/Class as the previous switch. Cables were rerouted but not in any existing tray system. Therefore, the cables will not impact the cables separation design. No unreviewed safety question was involved.

SE-96-144-DE

VARIOUS DUCT REPLACEMENTS IN VENTILATION SYSTEMS

Duct replacement in the ventilation systems followed existing design specifications and plant drawings where applicable or match existing field conditions as close as possible. Any material substitutions or variations from design specifications or variations from field conditions were documented as acceptable. This change did not impact system operability or have any affect on the plant mode of operation. The duct replacement did not affect design parameters. No unreviewed safety question was involved.

SE-96-145-PR

INSULATION BLANKET REMOVAL DURING SUPPORT INSTALLATION

A procedure supplement traveler was used to control the removal and replacement of insulation blankets on heat traced piping during the implementation of Chemical and Volume Control System support modifications. Temperature was frequently monitored to determine that it did not decrease below the specified low temperature of 145 degrees F. There was no increase in the consequences of equipment malfunctions previously evaluated. No unreviewed safety question was involved.

SE-96-146-DE

REPLACE OBSOLETE 3/4" HIGH PRESSURE TURBINE CYLINDER HEATING STEAM BLOWDOWN VALVE

The replaced High Pressure Turbine cylinder heating steam valve is used to remove drain from 2" steam line. The materials of the new valve conform to or exceed the original valve design specifications. There was no impact to the plant's mode of operation. No unreviewed safety question was involved.

SE-96-147-DE

REPLACE FLOW TRANSMITTERS

The replacement of Flow Transmitter FT-110 does not impact the operability of any system. Materials of the new transmitter have not changed and are compatible with their environment. Since the flow transmitter is on a 1' line, it is exempt from ISI/IST. The new transmitter does not change the plant's mode of operation or any system parameter. No unreviewed safety question was involved.

SE-96-148-MM

UNIT 1 FLOOR PLUG CONCRETE INSERTS

This modification installed 4 new Drillco Flush-Mount Maxi-Bolts and 4 new lifting devices to be used for lifting a removable concrete floor cover in the Unit 1 Chemical Systems Building. The floor plug provides access to the Spent Resin Tank #13 for monitoring and inspection. Anchor bolts are carbon steel compatible with other steel items in the area and the materials used to repair damaged concrete have concrete characteristics compatible with the existing concrete. This modification did not impact any parameter of any plant systems. No unreviewed safety question was involved.

SE-96-149-PR

PURGING AIR FROM THE PIPING BETWEEN THE MAIN GENERATOR AND THE HYDROGEN DRYER, WHILE THE HYDROGEN DRYER IS OUT OF SERVICE

A temporary operating instruction was used to purge air from the piping connecting the Main Generator and the Hydrogen Dryer Skid with carbon dioxide, with the hydrogen Dryer Skid out of service. Although a Hydrogen Dryer was installed, the dryer has not been put into service. Therefore, this temporary operation instruction did not change the plant configuration from its current configuration. There was no increase in the consequences of equipment malfunctions previously evaluated. No unreviewed safety question was involved.

SE-96-150-DE

REPLACE WASTE HANDLING SYSTEM VALVE

The replacement of Valve LW-824 in the Integrated Liquid Waste System did not affect the system's operability nor impact the plant's mode of operation. The materials of the new valve conform to the original piping and valve design specifications. There were no new failure modes. No unreviewed safety question was involved.

SE-96-151-EV, Rev.2

PAINTING UNIT 1 FAN ROOM

There were no new failure modes introduced by surface preparation and painting of the Unit 1 Fan Room. Proper safety precautions were taken to ensure the habitability of the Control Room through the use of air monitoring and HEPA Filters. The Control Room ventilation was placed in the incident mode during the application of epoxy. New paint coatings are compatible with the original installations and meet the Fire Protection Program Plan and Appendix R compliance. This activity had no impact, either mechanical or electrical. No unreviewed safety question was involved.

SE-96-152-DE

REPLACE OBSOLETE FUSIBLE SAFETY SWITCH FOR UNIT #1 FUEL HANDLING CRANE

The installation of the new safety switch is a direct replacement of the obsolete safety switch and does not change the intended function of the switch. The new safety switch provides protection and control to the Unit #1 fuel handling crane. Electrical and mechanical configurations were not affected. No unreviewed safety question was involved.

SE-96-153-TR

TEMPORARY REPAIR TO THE 25B FEEDWATER HEATER OUTLET THERMOWELL FITTING

The 25B Feedwater Heater outlet thermowell fitting was leaking. This thermowell was sealed using a leak repair process consisting of threading a 1/4" NPT pipe thread into the well and installing a leak repair pressure connection which was sealed by an injected sealant. The thermowell connection was disabled by this repair. This was acceptable

because this is a spare thermowell which serves no active function at this time. The temporary repair did not affect how the 25B Feedwater Heater operates nor the plant's mode of operation. Electrical and mechanical redundancy, isolation and separation was not affected. No unreviewed safety question was involved.

SE-96-154-TR

REPLACE DAMAGED SECTION OF CABLE

A 2' to 3' section of damaged 350MCM cable on phases B and C that supplies auxiliary loads for Main Transformer 22 was cut off and replaced with a section of equal length 4/0, EPR, 600V highly stranded cable. The splice was then insulated using the proper tape and method, and then connected to the load side fuse clip lugs. The new cable is designed to handle the required ampacity. This cable replacement does not impact the electrical system capacity, output or voltage. No cable trays were impacted, all cable design criteria remain the same. No unreviewed safety question was involved.

SE-96-155-TM

MAINTENANCE AND OUTAGE BUILDING (MOB) ALTERNATE FEED

A temporary power feed was provided to the MOB. There are no interactions with Unit 2 systems or equipment, no interactions with Unit 1 systems or equipment contained in the Unit 1 Safety Analysis Report. No unreviewed safety question was involved.

SE-96-156-TM

ALTERNATE FEED TO OFFICE TRAILERS

Temporary cables were run to provide an alternate power feed to office trailers. There are no interactions with Unit 2 systems or equipment, and no interactions with Unit 1 systems or equipment contained in the Unit 1 Safety Analysis Report. The jumper does not connect to a 1E system, no instruments or controls are involved. No unreviewed safety question was involved.

SE-96-157-DE

REPLACE OBSOLETE STEAM TRAP STRAINER DRAIN VALVE

The replaced strainer drain valve does not change the valve function or system parameters. It is used to remove drainage from the 8" steam dump line to the condenser. The replacement valve conforms to or exceeds the original valve specifications. It does not impact the plant's mode of operation nor introduce any new failure mode. The new valve is not in the ISI/IST program, does not impact environmental conditions of the plant. No unreviewed safety question was involved.

SE-96-158-TM

JUMPER FOR MAINTENANCE AND OUTAGE BUILDING (MOB) FEED TO A DISCONNECT SWITCH

Temporary cables were run to provide a MOB feed to a disconnect switch. This jumper has no interactions with Unit 2 systems or equipment, and no interactions with Unit 1

systems or equipment contained in the Unit 1 Safety Analysis Report. No instruments or controls are involved with this jumper, it does not connect to a 1E system. No unreviewed safety question was involved.

SE-96-158-TR

TEMPORARY REPAIR TO THE 26 HEATER EXTRACTION STEAM PIPING

A leak repair tee clamp was temporarily used to seal a leak on a weld on the #26 heater extraction steam piping. The temporary repair was designed to meet or exceed the system design temperatures and pressure and operate in the same manner as the original. It will continue to supply steam to the #26 A, B, and C Feedwater Heaters and not affect the plant's mode of operation. This temporary repair does not create a new high energy line break. No unreviewed safety question was involved.

SE-96-159-TM

JUMPER FOR MAINTENANCE AND OUTAGE BUILDING (MOB) FEED TO 50KVA L&P TRANSFORMER

Temporary cables were run to provide a MOB feed to a light and power transformer. There are no interactions with Unit 2 systems or equipment, and no interactions with Unit 1 systems or equipment contained in the Unit 1 Safety Analysis Report. The jumper did not impact any system's design pressures, temperatures or other parameters. No unreviewed safety questions was involved.

SE-96-160-TM

TEMPORARY FEED FOR DURALINES

A temporary feed for non-safety related Duralines EPY-17 and EPY 16 was provided. There are no interactions with Unit 2 systems or equipment, and no interactions with Unit 1 systems or equipment contained in the Unit 1 Safety Analysis Report. The jumper does not impact any system's design pressures, temperatures or other parameters. No unreviewed safety question was involved.

SE-96-162-DE

REPLACEMENT VALVES FOR 3" KITAZAWS BALL VALVES

The replacement ball valves were essentially identical to the existing valves. This replacement did not impact the operability of the Service Water System nor any of its interfacing systems. The new valves are seismically qualified and will be restrained in the piping system in an identical fashion as the previous valves. No unreviewed safety question was involved.

SE-96-163-DE

REPLACE STEAM TRAP VALVE

Valve MS-820 was replaced. This is a drain valve for a trap from a steam dump line. The plant's mode of operation was not impacted. The valve is not seismic and no safety

related equipment is located nearby. Materials of the replacement valve conform to or exceed the original specification. No unreviewed question was involved.

SE-96-164-TR

TEMPORARY REPAIR TO THE CROSSUNDER PIPE TO "B" SIDE MOISTURE SEPARATOR REHEATER (MSR)

A temporary repair was made to the Crossunder pipe by installing a leak repair injection valve and injecting sealant into the threads. The Crossunder piping with the temporary repair will operate in the same manner as the original by continuing to supply steam to the MSR's. The materials of the temporary repair are compatible with the previous installation. The Crossunder is considered high energy and the crossunder is part of the erosion and corrosion inspection program. However, this temporary repair does not create a new high energy line break. There is no impact or affect on any instruments or controls. No unreviewed safety question was involved.

SE-96-165-MM

IP #2 GENERATOR BEARINGS THERMOCOUPLES

This modification replaced the thermocouples for the generator bearings #9 and #10; wiring to a new junction box and replaced the terminals in the existing junction box. This change does not affect the operability of the system or the equipment. It improves the accuracy of the temperature reading. The newly installed thermocouples are identical and of the same material as the existing ones. Thermocouple terminals and cables are suitable for the application and have been used in the plant at various locations. This modification did not add or change electrical load on any unit 2 buses, did not impact Emergency Diesel or Station Battery loading. No unreviewed safety question was involved.

SE-96-166-DE

UH-87 VALVE REPLACEMENT

The new UH-87 valve operates in the same manner as the original. The materials of the new valve meet original design specifications. This was a valve change only and did not affect the system's design. The new valve does not interact with safety-related equipment. It is located in a high energy system but does not create a new high energy line break that has not been analyzed previously. No unreviewed safety question was involved.

SE-96-167-MM

AMMETER TEST SWITCH CONNECTION MODIFICATION FOR PILOT WIRE RELAY CIRCUITS

The Ammeter Test Switch connection modification in the non-safety pilot wire relay circuits will reduces the probability of spurious trips during all conditions of plant operation. The modification does not impact the plant's mode of operation, does not impact any system parameters. No unreviewed safety question was involved.

SE-96-168-MD

IP-2 REPLACEMENT OF H2 RECOMBINERS

This modification was evaluated for the replacement of the Hydrogen Recombiner System which contained fan blowers, Combustor Recombiners, and air ducting with Passive Auto-Catalytic Recombiners (PAR's) that can operate on natural draft and do not require fan blowers. The new recombiners were installed in the same location as the current recombiner. This system, which prevents the concentration of hydrogen in containment from reaching a combustible limit, is a safety related system required for post accident use and has no function during normal operations. The new PARs are not operational pending completion of testing and a subsequent license amendment. No unreviewed safety question was involved.

SE-96-169-TR

TEMPORARY LEAK REPAIR OF MS-662

MS-662 is a 3/4" root stop valve is used to isolate pressure transmitters. A leak was repaired by sealant injection. This temporary repair to this valve does not affect systems that interact with the equipment or system used for safe shutdown of the plant during normal, abnormal, or accident conditions. The materials of the temporary repair are compatible with the existing installation and will not impact the plant's mode of operation. This valve is not in the ISI/IST program. No unreviewed safety question was involved.

SE-96-170-TR

TEMPORARY LEAK REPAIR OF 3/4" ELBOW IN THE CYLINDER HEATING STEAM LINE

The temporary repair was made to a pin hole leak since a permanent repair would require the unit to be in hot shutdown. Materials for the temporary repair are compatible with the existing installation and did not interfere with the normal function of the Cylinder Heating Steam Line which is to supply steam to the turbine glands. No new failure mode was introduced and no impact to the plant's mode of operation was generated due to this repair. The Turbine Cylinder Heating Steam piping is not in the ISI/IST Program. No unreviewed safety question was involved.

SE-96-171-DE

INSTRUMENT AIR VALVE REPLACEMENT

The new valve IA-47 provides the same functions as the previous valve and has no impact on Class 1E equipment. It is the same size as the previous valve and generates no changes to system parameters. The new valve meet seismic requirements and is seismically restrained. EQ was not applicable to this replacement. No unreviewed safety question was involved.

SE-96-172-TM

TURBINE-GENERATOR OIL LEAK COLLECTION

Drip catchers and drain hoses routed lube oil leakage to the Main Turbine-Generator Lube Oil System. The purpose of the jumper was to contain existing Documented Leakage. This was essentially a house keeping device and had no impact on the plant's mode of operation. No unreviewed safety question was involved.

SE-96-174-DE

REPLACE ISOPHASE BUS DUCT RETURN AIR LOW FLOW SWITCHES

The new Air Low Flow Switches operate in the same manner as the original and do not affect the plant's mode of operation. The materials of the new switch are compatible with the previous installation. The new switch is not IE, did not change the electrical system nor any electrical cables or routing. There are no operator interactions involved with this switch replacement, it does not impact or affect any instruments or controls associated with any analyzed accident response times. No unreviewed safety question was involved.

SE-96-175-DE

REPLACE OBSOLETE WESTINGHOUSE TYPE W MCC FUSE BLOCKS

Westinghouse Type W MCC fuse blocks were replaced with equivalent Gould Shawmut fuse blocks. The new fuse blocks do not alter or change the intended function and do not impact the electrical system. They are Class 1E qualified, utilized the existing cable and mounting configuration. No unreviewed safety question was involved.

SE-96-176-MM

IP-STATION SERVICE TRANSFORMER TEMPERATURE CONTROLLERS

This modification replaced all four Station Service Transformer Temperature Controllers with four Multi Phase Electronic Temperature Monitors. It does not impact or is not impacted by the plant's mode of operation. The replacement temperature monitors have no safety function and will perform the same functions as the previous controllers. Therefore, the probability of a previously evaluated accident is not increased. The new monitors have no impact on any parameter of the 6.9kV or 480 V Systems, no Class 1E equipment is affected. No unreviewed safety question was involved.

SE-96-177-PR, Rev.1

CONTROL OF HEAVY LOADS

Indian Point 2 maintenance procedures and calculations, required to replace the Service Water Pumps and motors, were reviewed to evaluate the ability to move heavy loads over safety-related equipment in the service water area of the dock in a safe manner in accordance with NRC Bulletin 96-02. The calculations, evaluation of plans and capabilities for handling heavy loads assure the probability of a load drop and its consequences are minimized. Therefore, the probability of a previously evaluated accident is not increased. The identification of minimum requirement for safe crane

operation will assure that the "margin of safety" in terms of minimum number of pumps is maintained. No unreviewed safety question was involved.

SE-96-180-DE, Rev. 1

REPLACEMENT OF NUCLEAR INSTRUMENT SYSTEMS (NIS) CONNECTORS AND CABLES

Nuclear Instrumentation System connectors and cables were replaced. All materials utilized in the replacement were compatible with the previous installation. This change did not impact the plant's mode of operation and no new failure mode was introduced. The NIS cables are Class 1E, however there is no impact from this change. This change replaced cable at the detector but did not reroute vital cables within the cable trays. The new connectors are environmentally qualified and do not impact the electrical system capacity, output or voltage. No unreviewed safety question was involved.

SE-96-181-MM

INSTALLATION OF OVERVOLTAGE RELAY ON MAIN GENERATOR

This modification installed an overvoltage relay in the Control Room away from the Turbine Hall and allows the relay to activate an alarm or annunciation at any time the generator bus voltage reaches an overvoltage condition that may affect the generator, transformer or class 1E electrical equipment. It permits the operators to take manual actions necessary to correct the condition if possible or trip the unit manually. No impact or marginal safety issues from the UFSAR are relevant with the installation of this relay and no new failure modes were introduced. There was no change in 1E bus loading. No unreviewed safety question was involved.

SE-96-182-TM and SE-96-192-TM

UTILITY TUNNEL SUMP PUMP

Rubber hose rated for 250 psi and a sump pump were utilized to replace a failed sump pump. Liquid accumulation was removed through a normal discharge flowpath to prevent area flooding. The original function of the Utility Tunnel Sump Pump was duplicated and therefore no significant changes were expected. Should an unexpected failure have occurred the operator on station during pumping operations would isolate and remedy the failure. There was a negligible impact by pump, hoses or fittings. No unreviewed safety question was involved.

SE-96-183-DE

REPLACE UNIT 1 GRINNEL-SAUNDERS TYPE DIAPHRAGM VALVES

This change replaced Grinnell-Saunders type diaphragm valves on the Unit 1 Integrated Liquid Waste System with equivalent type diaphragm valves. This change did not impact the operability of any system and no new failure modes were created. The new valves meet the system's design pressures, temperatures, flow rates, and have compatible materials. The system is not required to remain functional following a seismic event. No unreviewed safety question was involved.

SE-96-184-DE

VALVE SA-923 AND SA-924 REPLACEMENT

Station Air valves, SA-923 & SA-924, were replaced. The new valves operate in the same manner and provide the same functions as the previous valves. They have a greater relieving flowrate which is acceptable since overpressure would be relieved faster to protect equipment and piping. The materials of the new valves are acceptable for application in the Station Air System and there is no impact to Class 1E equipment. No unreviewed safety question was involved.

SE-96-185-PR

PROCEDURE FOR RESPONSE TO UNCONTROLLED REACTIVITY ADDITION

In response to recent industry events, Abnormal Operating Instruction A 3.4 was revised to improve operator response to reactor trips with reactivity anomalies and uncontrolled reactivity additions. The procedure content was restructured and simplified. No plant hardware was affected. Safety related functions as described in the UFSAR were not changed. No unreviewed safety question was involved.

SE-96-186-TM

LAUNDRY WASTE TANK ALTERNATE LEVEL INDICATION

A temporary level indicator was used to assist in restoring proper level instrument accuracy on the Laundry Waste Tank. It was put in service for calibration purposes only. There was no affect on the plant's mode of operation. This jumper was non-electrical in nature, did not affect other instrumentation. No unreviewed safety question was involved.

SE-96-187-EV

OPERATION OF N₂ VALVE IN OPEN OR CLOSED POSITION

This evaluation allows N₂ valve 863 to be changed from normally closed to "open or closed" in the UFSAR. Leaving the valve open will not affect any safety related equipments, existing design capability or result in unacceptable safety related consequences. It will fail closed on loss of air or electric power and if necessary can be closed manually. This valve is already in the containment leakage B & C test program and administrative controls exist to direct closure under accident conditions. Maintaining the valve in the open position requires quarterly testing of the valve in accordance with ASME XI. It has no effect on the characteristics or response time of instrument or control systems. No unreviewed safety question was involved.

SE-96-188-DE

REPLACE CONDENSATE DRAIN

The previous Condensate Drain was replaced with a unit manufactured by Yarway which is functionally identical. The new one is compatible with the Condensate System but was upgraded to stainless steel internal components which will eliminate the corrosion

interactions. This is a mechanical change that has no impact on electrical systems. No unreviewed safety question was involved.

SE-96-189-TM

CASK WASH PIT TEMPORARY PUMP

The temporary pump and hose connection were used in the Cask Wash Pit. They did not impact any system's operability or design parameters. A hose failure was possible but would have been completely within the confines of the Cask Wash Pit. The pump and hose change was used only with personnel in attendance. The change tied into the Liquid Waste System at a point specifically designed for this purpose and did not affect any system parameters. This change has no impact on Class 1E equipment or electrical systems. No unreviewed safety question was involved.

SE-96-190-DE

INSTRUMENT AIR PRESSURE TRANSMITTER REPLACEMENT

A new pressure transmitter was installed in the Instrument Air System. It was recommended by the original equipment manufacturer, provides the same function and operates in the same manner as the previous transmitter. Therefore it generated no impact to the Instrument Air System. It was installed in the same manner as the existing transmitter, had no impact on the electrical system. No unreviewed safety question was involved.

SE-96-191-DE

REPLACE OBSOLETE DISCONNECT SWITCH

The new disconnect switch is electrically and functionally equivalent to the obsolete disconnect switch and does not change the intended function of the switch. The plant's mode of operation is not affected and no new failure modes are introduced by this change. The switches are Class 1E for associated Class 1E loads and all electrical ratings remained unchanged. Existing mounting configuration and cables were utilized. No unreviewed safety question was involved.

SE-96-193-DE

UH-8-226 CHECK VALVE REPLACEMENT

The new replacement check valve operates in the same manner as the original. It does not affect the plant's mode of operation and no new failure modes are introduced. Materials of the new valve are compatible with the previous installation and no system parameters are changed or affected. The valve replacement is non-electrical, non EQ and does not impact the ISI/IST Program. No unreviewed safety question was involved.

SE-96-195-TM

REMOVAL OF RADIATION MONITOR FROM SERVICE

This jumper allowed Steam Generator Blowdown Radiation Monitor R-49 to be removed from service without introducing any new failure modes. The change removed

the high radiation auto closure feature from the blowdown valves. Daily chemist sampling and increased operator awareness ensured the requirements of NRC IE Circular 80-18 were addressed. The change occurred inside a Control Room rack that is seismically qualified and did not alter this qualification. The jumper introduced two small copper wires whose gauge and composition were compatible with the existing installation. No new electrical loads were added. No unreviewed safety question was involved.

SE-96-196-EV

UPDATE UFSAR TABLE 5.2-1 ITEM 19

Valve 5459 is a manually operated, normally closed containment isolation valve. The change of the position from "open" to "closed" in Table 5.2-1 for the normal position and position during shutdown does not impact any safety related equipment. This valve acts as a bypass around SOV-3416 and SOV-3417. These valves provide remote operation of containment isolation, are non-automatic and are closed under Emergency Operating Procedure ES-1.4. The UFSAR change will not affect the safety related function of valve 5459. No unreviewed safety question was involved.

SE-96-198-MM

RADIATION MONITOR R-50 PRE-AMPLIFIER REPLACEMENT

Radiation Monitor R-50 monitors the Gas Decay Tanks. The existing preamplifier circuit board which is obsolete because it has been discontinued by the vendor was replaced. This board is located in the seismically qualified pre-amplifier box on the Monitor Skid which contains safety related equipment and therefore does not change any requirements. The replacement circuit board is of similar material as the original one. No unreviewed safety question was involved.

SE-96-199-MM

HOT PENETRATION AIR-CONDITIONING UNIT REMOVAL

The allowable concrete temperature of the vapor containment in the area of the steam and feed penetrations was raised from 200F to 250F as documented in SE94-238-EV. The outside air ventilation provides sufficient cooling to keep the concrete temperature below 250F. This modification removed the air-conditioning unit (which has not operated for several years) and installed exhaust ducting for the Hot Penetration Cooling System. No new failure modes were introduced. The outside air ventilation provide sufficient cooling to keep the concrete temperature below 250F. No unreviewed safety question was involved.

SE-96-200-MD, Rev. 1

CONTAINMENT SPRAY ADDITIVE SYSTEM REMOVAL

This modification removed the Containment Spray Additive System and replaced its function with the installation of four stainless steel baskets containing Trisodium Phosphate (TSP). The TSP assures that the Containment Spray solution is in the proper

pH range to assure that Iodine released to the Containment atmosphere is removed in the event of a breach of fuel cladding following a LOCA and to provide corrosion protection. Westinghouse evaluation, WCAP-14495, concluded that the change is insignificant on the corrosion effects required for the one year post accident period for EQ equipment. The baskets were located on the Containment floor at elevation 46' below the flood level of elevation 51'. The four stainless steel baskets are seismically qualified and seismically mounted to the Containment wall and floor with Class A anchor bolts. The entire Containment Spray Additive System was removed and pipe caps were installed as referenced for isolation and removal. This modification required a License Amendment. No unreviewed safety question was involved.

SE-96-201-MM

SAFETY INJECTION PUMP ROOM ACCESSIBILITY

A new opening was constructed in the solid concrete masonry wall on the south side of the Safety Injection Pump Room at elevation 59' of the Primary Auxiliary Building to facilitate removal of the Safety Injection Pump 23 for repairs. The opening was structurally framed to prevent the wall from collapsing with the lower portion removed. During repair of the pump, appropriate shielding for ALARA was in place for personnel protection. The Alternate Safe Shutdown cabinet and a duplex wall receptacle was temporarily moved to allow construction of the new opening. The wall remains seismically functional, the temporary relocation of the Alternate Safe Shutdown cabinet was seismically restrained and the relocation of the receptacle did not change the seismic restraint capability. After the pump was replaced, the opening in the wall was closed using high density solid concrete blocks, without mortar, sandwiched between stiffened steel plates on each side. The replaced wall was designed to meet seismic requirements. No unreviewed safety question was involved.

SE-96-203-DE

VALVE REPLACEMENTS

Non Class A 3/4" and 1" Smith Gate Valves, Class 800 and 1500 replaced obsolete Smith gate valves in various systems. The replacement valves are functionally and materially identical to the existing valves. The replacement valves will meet or exceed all original design criteria for the systems and piping classification. No unreviewed safety question was involved.

SE-96-205-EV

TEMPORARY OFFICE INSTALLATION

This temporary building was constructed in the Unit No.1 Turbine Hall in accordance with applicable building codes. It utilizes fire resistant materials. An internal fire sprinkler system ensures that any internal building fires will be extinguished and not affect the operability of systems, structures or components in the Control Room, Battery Room or any other safety related equipment. The Fire Protection System has excess

capacity to meet the building fire sprinkler system flow. The added floor loading is within the existing design. No unreviewed safety question was involved.

SE-96-206-MM

MAIN TURBINE LUBE OIL VAPOR MIST SEPARATOR REPLACEMENT

The existing Mist Separator was replaced with a new one that is similar to the existing separator. The new equipment operates and functions the same as the old and utilized the existing blower. The new separator provides better efficiency because of the special glass fiber filtering material. The pressure drop across the new unit is within the allowable design limits. No unreviewed safety question was involved.

SE-96-210-PR

PROCEDURE REVISION TO SOP 10.6.4-OPERATION AND CONTROL FOR NON-AUTOMATIC CONTAINMENT ISOLATION VALVES

This procedure provides direction for the establishment of a Dedicated Valve Watch for the time periods that the Non-Automatic Containment Isolation Valves are open and direction to close them. It was revised to correct discrepancies and add a note that valve 732 does not require a Dedicated Valve Watch when the Reactor Coolant System is below 350F. No unreviewed safety question was involved.

SE-96-211-PR

EMERGENCY DIESEL GENERATOR 23 JACKET WATER PRESSURE SWITCH VIBRATION TEST

The purpose of this special test was to obtain vibration data to complete the root cause analysis of the recent Emergency Diesel Generator Water Jacket Pressure Switch failures. Accelerometers (approximately 12) were mounted (either magnetically or with adhesive tape) inside and outside the gauge panel for the 23 Emergency Diesel Generator and vibration readings were taken during startup, idling, 1750kW load and 2300kW load. The Jacket Water Pressure Switch 6-2 supports were modified and the same vibration readings taken. After completion of all vibration testing the accelerometers were removed and the gauge panel door closed. The accelerometers are very light weight and did not react with any safety related circuit, equipment or have any adverse seismic interaction with any equipment on the gauge panel. No unreviewed safety question was involved.

SE-96-212-TR

FEEDWATER CONTROL VALVES FCV-405 A, B, C AND CYLINDER ASSEMBLY TEMPORARY REPAIR

Inspection discovered a crack on a Feedwater Control Valve Cylinder assembly. These valves are within the Class A boundary (see drawing 9321-f-2019). This Cylinder assembly is not a pressure retaining component and is not part of the Code, thus allowing a temporary repair. The temporary repair removed the outer lip of the upper trim gasket rabbit and has been found acceptable by the valve manufacturer. The removal of the outer lip material will prevent further cracking and potential loose parts concerns. The outer lip

is not a pressure retaining surface and this temporary repair is not a Code repair. Quality Control performed a dye test to the machined area to verify all indications of the crack were removed. The operation of the valve or the system is not affected by this repair. No unreviewed safety question was involved.

SE-96-213-DE

SOLENOID OPERATED VALVE REPLACEMENTS

The Turbine Multiple Orifice Solenoid valves were replaced because the existing valves were leaking oil. The material for the replacement valves meets or exceeds the original valve design specifications. These valves are used during normal operation to test the Turbine Stop and Control Valves and the operational function is the same as the existing ones. No unreviewed safety question was involved.

SE-96-214-EV, Rev. 1

FEEDWATER CONTROL VALVES FCV-406A, B, C AND D POTENTIAL CRACKING OF THE LIP OF THE CYLINDER ASSEMBLY (LOOSE PARTS CONCERNS)

This evaluation is for postulated sources of loose parts introduced into the Feedwater System from the Feedwater Control Valves 406A, B, C and D based upon the cracks found on Feedwater Control Valves 405A and B and subsequently the broken parts of FCV-406A seat ring. Two broken parts from the valve seat ring were approximately 2" by 0.030" and 1" by 0.030". The postulated size of the loose part which would be similar to the FCV-405A and B cracking (see SE96-212-TR) for these valves is 1/8" diameter and 7" long. The size of all the loose parts mentioned in this safety evaluation are within the bounding assumptions of Westinghouse's safety evaluation for Steam Generator secondary side foreign objects and it was therefore concluded that there would be no adverse impact on the Steam Generators. No unreviewed safety question was involved.

SE-96-215-PR

AUXILIARY BOILER FEED PUMP 22 CONTROL VALVE FLOW VERIFICATION

A test verified the ability of the Feedwater Flow Control Valves to deliver the required flows to the Steam Generators in accordance with the Technical Specifications. Test pressure gauges were installed downstream of each control valve tested. Only one control valve was tested at a time. The Turbine Driven Auxiliary Boiler Feed Pump was operated and each control valve was opened to provide flow to the Steam Generator. Test data of the inlet and outlet pressure across the control valve for various flow rates up to 200 gpm was recorded and used to assess the operability of the control valves. As determined by evaluation, this test was bounded within the current operating limits of the plant. No unreviewed safety question was involved.

SE-96-216-EV

POLAR CRANE AUXILIARY HOIST REPAIRS

A 550 pound shaft was removed from the Polar Crane for repairs and lowered from the crane's walkway at elevation 160' to the Containment operating deck at elevation 95'. The

consequences of a load drop inside the Containment while at power were mitigated by 1) using equipment with sufficient capacity to lift the shaft; 2) selecting a concrete portion of the Containment operating deck at elevation 95' that does not have any safety related equipment between the Polar Crane's walkway drop area at elevation 160' and the elevation 95' below it and 3) a concrete area on the Containment operating deck at elevation 95' sufficient to prevent scabbing the underside of or perforating elevation 95' operating deck. The effect of dropping the 550 pound shaft to the planned elevation 95' operating deck location is insignificant. The tripod used for lowering the shaft was seismically restrained. No unreviewed safety question was involved.

SE-96-217-MM

PRESSURIZER JIB HOIST

A new one-half ton (1000 pound) capacity Jib Crane with electric hoist was installed on top of the Pressurizer shield structure at elevation 130' of the Containment building. A new structural steel base plate was installed to mount the Jib. The installation is seismically installed and seismically secured when not in use, additionally, a 650 pound load limit is imposed during plant operation. The capacity is not considered a "heavy load" as defined in NUREG-0612. Electrical connection is to the adjacent Duraline and no electrical loads are involved. No unreviewed safety question was involved.

SE-96-219-PR

UNIT NO. 1 NORTH CURTAIN DRAIN INSPECTION

This procedure temporarily removed Jumper 94-100 to permit inspection activities and then re-installed it. The North Curtain Drain is considered a contaminated system. No water was processed and precautions were taken to ensure that water did not enter the piping. In the unlikely event of fluid discharge from the pipe, it would be contained within the annulus and not become a radioactive effluent. No unreviewed safety question was involved.

SE-96-220-TM

VACUUM PUMP 2 FLOW SWITCH

The Low River Water Flow Switch Trip (which trips Vacuum Pump 2) was temporarily removed by this temporary modification. This change was mitigated by regular surveillance by the Water Treatment Plant operators. The equipment involved runs under a constant heat load and is not subject to rapid temperature changes. No impact on operability was involved. The switch is not required for abnormal or accident conditions. No unreviewed safety question was involved.

SE-96-221-EV

COMPONENT COOLING WATER VALVE 796 OPERATION IN THE OPEN OR CLOSED POSITION

This evaluation determined the acceptability of changing Table 5.2-1 of the UFSAR to reflect the position of Valve 796 as currently maintained by procedure. This valve is a

Containment Isolation Valve in the Component Cooling Water return line from the Excess Letdown Heat Exchanger and by plant procedure is closed when excess letdown is not required. The UFSAR table indicates the valve's normal position is open and is open during shutdown. Valve 796 is only opened when excess letdown is required for system operation and receives a Phase A isolation signal to close to form the Containment boundary. Valve 796 will not be opened after an accident. UFSAR Table 5.2-1 will indicate that the valve can be either open or closed during normal and shutdown conditions. The closure of this valve will not impact any previously analyzed events. No unreviewed safety question was involved.

SE-96-222-DE

POLAR CRANE 21 TROLLEY BRAKE REPLACEMENT

The existing Polar Crane trolley brake was replaced with an equivalent one. The brake is not associated with the hoisting mechanism and is not a load bearing item. There is no change to the operability of the Polar Crane. No unreviewed safety question was involved.

SE-96-224-TM

FIRE PROTECTION DELUGE PANEL ALARM

The 28 VDC Battery Trouble input to the category alarm was temporarily removed in absence of the Battery. This change returned the Deluge System alarms inputs to operability by unmasking the alarm caused by the Battery trouble. Local alarms continued to be annunciated and all other functions were unchanged. The function of the Fire Protection System was not affected. No unreviewed safety question was involved.

SE-96-225-TM

CONTAINMENT TEMPORARY TEMPERATURE INDICATION

Containment temperature indication was lost due to failure of a controller module. A millivolt meter was seismically installed in the Containment and connected to the terminal points that measures Containment temperature. The meter was installed in the box normally used by the defective controller. A chart was provided to convert the manually taken millivolt reading from the Containment temperature thermocouple to temperature. TCV-1103 was maintained fully opened to ensure adequate Service Water flow to the Fan Cooler units. No unreviewed safety question was involved.

SE-96-227-MD

INSTALLATION OF A SPACE HEATER AND ELECTRICAL HEAT TRACING FOR VALVE FP-815

The existing space heater did not adequately maintain the temperature in the alley south of the Residual Heat Removal Pumps. An electrical space heater and heat tracing for valve FP-815 and its associated piping was installed at elevation 15' in the Plant Auxiliary Building and the existing space heater was removed. The Fire Protection piping and Valve FP-815 was electrically heat traced and thermally insulated. This installation did

not modify any safety related system. The installation is seismically restrained due to its location near a safety related component. No unreviewed safety question was involved.

SE-96-228-MD

SERVICE WATER PUMP REPLACEMENTS

The existing Service Water Pumps were replaced. The existing motors, piping, controls and instrumentation were retained. The replacement pumps are functionally the same as the existing ones but with improved materials, enhancing strength and corrosion resistance. There is little or no change in the motor loadings as the brake horsepower of the new pumps at design conditions is identical or slightly less than the existing ones. The seismic qualifications of the new pumps were demonstrated by calculation from the manufacturer. The new pump mass and geometry are almost identical to existing ones and therefore did not impact the seismic capability. No unreviewed safety question was involved.

SE-96-229-MD

BYPASS SWITCHES FOR DROPPED ROD TO INITIATE A TURBINE RUNBACK

Two selector switches and associated wiring, one for each channel, were installed in the Central Control Room to provide the capability to defeat the Turbine Runback from a Nuclear Instrument System dropped rod condition. The Turbine Runback is no longer required. The installation is seismic and Class 1E. No unreviewed safety question was involved.

SE-96-230-EV

AIRLOCK VALVES 85A, 85B, 95A AND 95B OPERATION

This evaluates the acceptability of revising the UFSAR Table 5.2-1 and Figure 5.2-27 to correct the positioning of the Airlock Valves which are interlocked with the Airlock Doors. The UFSAR states that all the Airlock Valves are to be closed. The safety function for the Airlock Valves is to maintain Containment isolation as required. Access to the Containment is not possible through the personnel airlock if all four Airlock Valves are closed. Airlock Valves 85A and 95A may be open when 85B and 95B are closed OR 85B and 95B may be open when 85A and 95A are closed. Either set maintains Containment isolation and meets the Technical Specifications requirements. No unreviewed safety question was involved.

SE-96-231-DE

WASHWATER PIPING PRESSURE GAUGES REPLACEMENT

This modification replaces the pressure gauges on the Washwater System located on the Unit No.2 dock to solve the freezing problem with the existing gauges. No other systems or modes of operation are affected. No unreviewed safety question was involved.

SE-96-232-DE

SHEAVE REPLACEMENT FOR THE ISOPHASE FAN MOTOR

The sheave for the Isophase Fan Motor was replaced. The system's design and operation is not changed and the material is according to design specifications. It does not react with any safety related equipment or system. No unreviewed safety question was involved.

SE-96-233-MD

TRACE, DISCONNECT CABLE

Cable PE7-LL2, retired in place heat trace cable, was traced to verify that no other device was connected. It was then disconnected from its circuit breaker. All devices associated with the previously removed Boron Injection Tank were disconnected and removed from the Control Room racks. This change only removed equipment that was previously deactivated and retired in place. No unreviewed safety question was involved.

SE-96-235-TM

FIRE PROTECTION DELUGE PANEL ALARM

The Containment Pressure Relief Alarm module input to the category alarm was temporarily removed because it was malfunctioning. This change allowed the Deluge System alarms inputs to operate as needed by unmasking the alarm caused by the module trouble. Local alarms continued to be annunciated and all other functions remain unchanged. No unreviewed safety question was involved.

SE-96-237-TR

BOILER FEED PUMP DISCHARGE CHECK VALVES TEMPORARY REPLACEMENT OF PIVOT PINS

The existing pivot pins in check valves BFD-1 and BFD-1-1 were replaced with new pins; however, pins with the proper surface hardening process were not currently available. This temporary repair used pins fabricated of the same material as the existing ones but not hardened. They were replaced during the next refueling outage, within the expected life of the non-hardened pins. The valve manufacturer has determined this to be acceptable. The safety related function of the Feedwater System was not affected. No unreviewed safety question was involved.

SE-96-238-TM

ALTERNATE SEAL WATER SUPPLY FOR WASHWATER AND RIVERWATER PUMPS

This temporary modification provided a fire hose to connect the Low Pressure Hydrant LP "A" to the Washwater and Riverwater Pump Seal Water while their normal supply was unavailable. There no adverse effect on any system. No unreviewed safety question was involved.

SE-96-239-MD

ENGINEERED SAFEGUARDS RELAY REPLACEMENT

The existing twelve Westinghouse MG6 master relays in the Engineered Safeguards Actuation system were replaced with new Electroswitch LOR relays and knife switches in a new seismically qualified panel mounted on the top of the existing Engineered Safeguards relay racks. Flexitest knife switches were installed in the output circuit of the Electroswitch master relays to improve testability of the Engineered Safeguards actuation relay system. The new Electroswitch relays and the Flexitest knife switches are Class 1E and seismically qualified. The installation retains the seismic and separation requirements through the attachment and wiring of the new panels to the existing Engineered Safeguard relay racks. The new relays have a higher inrush current, a slightly faster actuation time and a drop out voltage well below the minimum required battery supply voltage. None of these differences affect the safety function of the Engineered Safeguards system. System testing was improved and simplified. No unreviewed safety question was involved.

SE-96-241-GM

GENERIC REPLACEMENT OF HORIZONTAL CENTRIFUGAL PUMP AND MOTOR ASSEMBLIES UP TO 25 HP FOR LIQUID APPLICATIONS

This modification allows for the replacement of pump and motor assemblies, Class A and Non-Class A, provided that the installation meets the conditions required. Minor changes to piping, piping supports, foundations, conduits, electrical protection and conduit supports are permitted. Requirements and specifications for the replacement assemblies will be the same as the for the original assemblies. No unreviewed safety question was involved.

SE-96-242-MM

VOLUME CONTROL TANK PRESSURE CONTROL

The existing 1/4" Nitrogen and Hydrogen pressure regulators for the Volume Control Tank were replaced with stainless steel 3/4" regulators. The regulators that were replaced were too small to maintain constant cover gas pressure during large transients in the Volume Control Tank. The new equipment functions in accordance with the original design. Also, the back pressure controller was replaced to provide settings above 15 psig. The equipment is seismically supported. Functioning of the system is not changed. No unreviewed safety question was involved.

SE-96-243-TM

TEMPORARY SPHERE FOUNDATION SUMP PUMP

A temporary hose served as an alternate flow path while liquid waste system valves were repaired. Failure of the temporary hose would not result in an unmonitored release. No change in any system operability was caused by this jumper. No unreviewed safety question was involved.

SE-96-244-EV

CONTAINMENT ISOLATION VALVE 4136 UFSAR DISCREPANCY

Valve 4136 is a Manual Containment Isolation Valve . UFSAR Table 5.2-1 lists "Open" as its normal and shutdown position. This is inconsistent with plant procedures, the response to NUREG-0578 and the lessons learned after TMI. This valve must be closed to provide Containment isolation in the event of a design basis accident. The UFSAR position was changed to meet isolation requirements and be consistent with plant procedures. No unreviewed safety question was involved.

SE-96-245-EV

CONTAINMENT ISOLATION VALVES IN SAMPLING LINES UFSAR ACCIDENT POSITION CLARIFICATION

UFSAR Table 5.2-1 Items 1, 12, 18, 20, 52 and 53 are all sampling lines and their normal, shutdown and accident modes may be either "Open" or "Closed" as may be needed for sampling requirements and are therefore an operational choice. In the event of a LOCA, all these valves receive a Phase A Containment isolation signal to close. There is no change to the Containment isolation function. The UFSAR was corrected. No unreviewed safety question was involved.

SE-96-246-DE

TURBINE HALL ROOF FANS COVERS REPLACEMENT

The steel Turbine Hall roof fan covers were replaced with aluminum covers. The materials are compatible with the existing installation. There is no effect on any system from this material change. No unreviewed safety question was involved.

SE-96-247-DE

SENIOR WATCH SUPERVISOR'S OFFICE LIGHTS AND FIXTURES REPLACEMENT

The fixtures and lights for the Senior Watch Supervisor's Office lighting were replaced. No unreviewed safety question was involved.

SE-96-250-TM

FIRE PROTECTION DELUGE PANEL ALARM

The 28 VDC Battery Trouble input to the category alarm was temporarily removed in absence of the Battery. This change returned the Deluge System alarms inputs to operational by unmasking the alarm caused by the Battery trouble. Local alarms continued to be annunciated and all other functions were unchanged. The function of the Fire Protection System was not affected. No unreviewed safety question was involved.

SE-96-251-TM

STATION AIR COMPRESSOR FAN

A small muffin fan was installed in the Control Panel of Station Air Compressor 11. The fan provides sufficient air flow to cool the circuitry to prevent spurious compressor trips

during periods of warm weather. There is no impact to any plant operating mode by this Unit No.1 Station Air Compressor. No unreviewed safety question was involved.

SE-96-252-TM

ALTERNATE N2 TRUCK FILL TO PRIMARY AUXILIARY BUILDING(PAB)

Jumper 96-138 was used to provide a source of N2 to the PAB N2 bottles during corrective maintenance of a check valve in the N2 fill line. The tagout used for repair of check valve 1689 required removal of the truck fill to the PAB cover gas system, the IVSWS supply system and the Weld Channel N2 backup system all required replenishment on a daily basis. The jumper consisted of a check valve at the service end, a hose secured each five to ten feet to prevent whip in the event of a hose failure and connection individually to the systems requiring fill. An operator continuously manned the fill line during each use. This jumper did not involve any unreviewed safety question.

SE-96-254-MD

DISCONNECT STEAM & WATER ANALYZER TROUBLE ALARM

The Central Control Room Panel alarm input entitled "Steam and Water Analyzer Trouble" was disconnected. This alarm function was to detect intrusion of river water into the Condensate System. The quality of the river water has changed so that even on the highest set point this alarm is constantly annunciated. Other in-line instruments will serve the function that this alarm provided. No unreviewed safety question was involved.

SE-96-256-MD

CENTRAL CONTROL ROOM VENTILATION UPGRADE

This modification to the ventilation system provided for the pressurization of the Central Control Room. This is accomplished by bringing outside air through the carbon filter with a booster fan operating upon a Safety Injection or High Radiation signal to reduce unfiltered air in-leakage. On a Smoke or Toxic Gas signal the ventilation system will operate in 100% recirculation mode with the outside air isolated and the carbon booster fan not operating. Safety Injection or High Radiation will override a Smoke or Toxic Gas signal. Dampers B and B' are locked open to meet single failure criteria. A new gravity back draft damper was installed as a backup to block the outside air from mixing with recirculation air during Toxic Gas or Smoke incidents. The new back draft damper, relays and associated conduit were seismically installed. New cable installed for this modification complies with separation requirements. This modification enhances the habitability of the Control Room. No unreviewed safety question was involved.

SE-96-257-DE, Rev. 1

PENETRATION H2O THERMOLAG REPLACEMENT

The ThermoLag fire barrier material was removed from the enclosure around Penetration H20. A replacement fire barrier material, Interam E54A was installed. A commitment was made December 12, 1994 to remove the ThermoLag. The new material provides a three hour fire barrier enclosure. The seismic integrity of the affected structures is not

adversely impacted by this modification. This change restored the functionality of the fire barrier enclosure to protect the safe shutdown equipment contained therein. No other functions were affected by this modification. No unreviewed safety question was involved.

SE-96-258-DE

USE OF FLEXI-LOAD METALLIC GASKETS IN NON-CLASS A APPLICATIONS

Flexi-Load gaskets were substituted for other gasket types in existing installations. The new gaskets are compatible with existing installations, and no system parameters were changed or affected. There was no operating impact by the change. No unreviewed safety question was involved.

SE-96-260-DE

REPLACEMENT OF VALVE 1689

Nitrogen system valve 1689 was replaced by a valve that provides the same functions, operates in the same manner, and meets or exceeds the requirements of the old valve. The valve provides nitrogen from the nitrogen truck to bottle banks; the new valve has higher flow but does not adversely impact the operation of equipment supplied by the nitrogen system. The new valve meets seismic requirements and its weight has been analyzed as acceptable. No unreviewed safety question was involved.

SE-96-262-TM

REPLACE DIODES IN NITROGEN CONTROL CIRCUIT WITH RESISTORS

Resistors replaced diodes in the control circuit for the condensate storage tank nitrogen supply. This change reduces the likelihood of electrical spikes interfering with the operation of the Controlotron Flow Computer. No new failure modes were introduced by the installation of the resistors and no safety-related equipment will be affected adversely by their failure. There is no effect on any existing margins of safety. No unreviewed safety question was involved.

SE-96-263-TM

INSTALLATION OF BLANK FLANGE ON LARGE GAS DECAY TANK (LGDT) RELIEF VALVE

A blank flange was installed on a tagged-out LGDT so the relief valve could be removed for preventive maintenance. The normal function of the LGDT relief valve is to relieve overpressures to the vent header; this function is not required when the tank is tagged out and the relief valve removed. The blank flange serves only to prevent back flow from pressure elsewhere in the system. The only leakage possible is back leakage through the blank flange mechanical joint, and the possibility of this leakage is no greater than the possibility when the tank and relief valve is in service. No unreviewed safety question was involved.

SE-96-264-TM

INSTALLATION OF BACKUP COOLING FOR HOUSE SERVICE BOILER (HSB) FEED PUMPS

Hoses were installed to provide city water as a backup to the normal HSB feed pump cooling water. This backup provides cooling when the normal cooling system is isolated, and it does not impact the high-energy portion of the auxiliary steam system. The hoses can be isolated by installed valves at each end, and the amount of city water used by the backup has little impact on the pressure of the city water system. No unreviewed safety question was involved.

SE-96-265-DE

REPLACEMENT OF 4" JENKINS GATE VALVES WITH CRANE VALVES

The use of the Crane valves does not affect system design pressures, temperatures, or flow rates, and the new valves conform to the original piping and valve specifications. The change took place in the integrated liquid waste system and does not affect operability. These are manual valves, there are no changes to human interactions. No unreviewed safety question was involved.

SE-96-266-DE

REPLACEMENT OF 4" JENKINS SWING CHECK VALVES WITH CRANE VALVES

The use of the Crane valves does not affect system design pressures, temperatures, or flow rates, and the new valves conform to the original piping and valve specifications. The change took place in the integrated liquid waste system and does not affect operability. There are no instruments or controls associated with this change, there are no human interactions. No unreviewed safety question was involved.

SE-96-267-DE

REPLACEMENT OF INSTRUMENT AIR/SERVICE AIR DRYER CHAMBER RELIEF VALVE

The replacement of the dryer chamber relief valve did not introduce any new failure modes, for the new valve was installed on the dryer chamber in the same manner as the old valve, performs the same functions as the old valve, and is operated in the same manner. There are no cables, instruments, or controls, and the weight of the new valve is less than 0.5% of the dryer assembly weight. No unreviewed safety question was involved.

SE-96-268-TM

TEMPORARY FEED FOR PILOT WIRE 86/1 RELAY

Trip Relay 86/1 was not functional due to frayed power supply wires, so a jumper was installed to permit repair of the frayed wires. No new failure modes were introduced by the use of this jumper, which used a spare breaker located in the same DC distribution panel as the normal electrical supply for the pilot wire trip relay. The #14 wire used is compatible with the existing relays and wiring. No unreviewed safety question was involved.

SE-96-269-MD

REPLACEMENT OF GAS STRIPPER FEED PUMPS 21, 22, AND 23

Pumps rated at 7.5 and 12.5 gpm were replaced with pumps rated at 25 gpm. The old pumps were originally used to pump the holdup tank contents into the boron recycle system (now retired), but were then used for the transfer of waste from the waste holdup tanks to the Unit 1 waste collection tanks. In the changed application, the old pumps had to be throttled, and constantly tripped during operation. The new pumps were specified to meet the existing system conditions. The installation remains seismic and the pumps maintain pressure boundary integrity. Electrical system capacity is not affected adversely, for the new pumps provide the increased flow rate with reduced horsepower rating. No unreviewed safety question was involved.

SE-96-271-TR

TEMPORARY REPAIR OF PINHOLE LEAK USING LEAK REPAIR CLAMP

A temporary repair was effected on a pinhole leak on the downstream weld of an extraction steam line isolation valve using a Leak Repair clamp. Although the extraction steam line is considered high energy, the temporary repair did not create a new high-energy line. The clamp was engineered to the system design. No unreviewed safety question was involved.

SE-96-272-TR

TEMPORARY REPAIR TO ELBOWS DOWNSTREAM OF OUTLET STOP VALVE

Leak Repair clamps were applied to the elbows downstream of the outlet stop valve for Main Steam Trap MST-42. The repairs did not affect either how the pipe operates or the plant's mode of operation, and no system parameters were changed or affected. The MST line is located in a non-seismic area and does not interact with any safety-related seismic equipment of system. The clamps are supported adequately by the existing MST and its supports. No unreviewed safety question was involved.

SE-96-273-MM

NEW ACCESS ROAD TO BUCHANAN SERVICE CENTER

A new access road was built to the Buchanan Service Center. The road does not affect the Site Emergency Plan or the Site Security Plan, nor does it introduce any environmental or safety hazards. The runoff from the road has negligible impact on site drainage, and there is adequate overhead clearance between the road and the energized overhead transmission lines to allow for vehicular traffic. No unreviewed safety question was involved.

SE-96-274-DE

REPLACEMENT OF VALVE FP-15

Fire protection valve FP-15 was replaced with a compatible valve that is not electrically operated and does not affect the seismic capability of any safety-related equipment. The change did not affect the Fire Protection Program, Appendix R, or any part of the

licensing basis. The replacement valve is supported adequately. No unreviewed safety question was involved.

SE-96-275-DE

REPLACEMENT OF VALVE FP-16

Fire protection valve FP-16 was replaced with a compatible valve that is not electrically operated and does not affect the seismic capability of any safety-related equipment. The change did not affect the Fire Protection Program, Appendix R, or any part of the licensing basis. The replacement valve is supported adequately. No unreviewed safety question was involved.

SE-96-276-DE

REPLACEMENT OF VALVE FP-17

Fire protection valve FP-17 was replaced with a compatible valve that is not electrically operated and does not affect the seismic capability of any safety-related equipment. The change did not affect the Fire Protection Program, Appendix R, or any part of the licensing basis. The replacement valve is supported adequately. No unreviewed safety question was involved.

SE-96-277-DE

REPLACEMENT OF VALVE UW-422

Valve UW-422 was replaced with a compatible valve that is not electrically operated and does not affect the seismic capability of any safety-related equipment. The change did not affect the Fire Protection Program, Appendix R, or any part of the licensing basis. The replacement valve is supported adequately. No unreviewed safety question was involved.

SE-96-278-DE

INSTRUMENT AIR (IA) SYSTEM FLEXIBLE HOSE REPLACEMENT

Existing armored rubber hose and copper tubing in the IA system were replaced with stainless steel components. The stainless flexible hose and tubing specifications exceed those of the old materials, represent an improvement to the old installation, and operation of the system was not changed. No unreviewed safety question was involved.

SE-96-282-GM

INSTALLATION OR ALTERATION OF EQUIPMENT, STRUCTURES, PIPING, AND HARDWARE

This generic modification facilitates all alteration, modification, or removal of equipment, structures, piping, and hardware when 1) there is no change in the Unit 2 or Unit 1 UFSAR or Technical Specifications, 2) all changes comply with the existing design criteria, and 3) all changes are non-Class "A" with no functional and/or physical interactions with any safety-related items, and are not located in an area with Class A items. No unreviewed safety question was involved.

SE-96-283-DE

REPLACEMENT OF MAIN STEAM ISOLATION VALVE AIR HOSES

The braided, reinforced air hoses for the main steam isolation valves were replaced. The new stainless steel hoses are compatible with the existing installation, and are more reliable in the existing environment than the old bronze hoses. There was no change in form, fit, function, or weight of the hoses. No unreviewed safety question was involved.

SE-96-285-DE

REPLACEMENT OF EDG FUEL OIL RELIEF VALVES

Relief valves DF-13 and DF-14 of the EDG fuel oil system were replaced with valves that have the same relieving pressure and the same overpressurization rating as the old valves. Pipe sizes and valve dimensions were unchanged. Materials did not change, and replacing the valves does not impact the operability of any system during any conditions. No unreviewed safety question was involved.

SE-96-286-DE

REPLACEMENT OF CVCS LETDOWN FLOW TRANSMITTER FT-134

Flow transmitter FT-134 was replaced with a transmitter whose materials are compatible with the existing installation. The new transmitter installation meets seismic requirements, and the weight difference between new and old transmitters was evaluated and found to be acceptable. No unreviewed safety question was involved.

SE-96-287-TM

LIQUID O₂ DEWARS FOR FLAME PHOTOMETER

Due to the corroded condition of the bulk liquid oxygen facility adjacent to the Unit 1 Screenwell House, a temporary supply of liquid oxygen was needed to supply the flame photometer for in-line analysis of the condensate pump discharge. This was accomplished by capping the O₂ supply tubing from the bulk O₂ facility and running new tubing to two liquid O₂ cryogenic dewars. This change did not reduce the margin of safety contained in the Technical Specifications or their bases, did not increase the consequences of previously-evaluated fires or accidents, and did not create an accident or fire of a different type. No unreviewed safety question was involved.

SE-96-288-DE

REPLACE OR UPGRADE SEALS ON COMPONENT COOLING PUMPS

Obsolete Chesterton 221 split seals were replaced with Chesterton 442 split seals, and 123 cartridge seals were upgraded with the 442 split seals on the 21, 22, and 23 component cooling pumps. The materials in the replacement seals are the same or better than in the older seals and are compatible with the component cooling water system. The new and old seals are the same weight and perform the same function. No unreviewed safety question was involved.

SE-96-289-TM

SWAP STATOR WATER PUMPS

An electrical jumper was applied to swap the Stator Water Pumps. One pump was maintained in operation during the swap-over. Both pumps remained operational. The system is not Class 1E. No loads were added or changed. No unreviewed safety question was involved.

SE-96-290-TM and SE-96-299-TM

TEMPORARY CITY WATER SUPPLY TO CAFETERIA

A red rubber hose and fittings evaluated to be compatible with the systems involved was used as a jumper to supply city water to the cafeteria while the normal city water system was removed from service. City water system flow and pressure were not affected, because the system was removed from service while the jumper was applied. No unreviewed safety question was involved.

SE-96-292-PR

REMOVAL OF SAFETY INJECTION SYSTEM (SIS) FLOOR PLUG TO PERMIT REMOVAL OF SPARE SAFETY INJECTION (SI) PUMP

An 8600-lb floor plug was removed to permit the lifting of the component parts of a 4000-lb spare SI pump through the floor opening. An A-frame lifting device was used to remove the floor plug and the same A-frame lifting device was used to lift the spare pump from the 59' level, through the resulting opening, to the 80' level. Upon removal of the pump, the floor plug was re-installed and the A-frame removed. No unreviewed safety question was involved.

SE-96-293-MM, Rev.1

RELOCATION OF SERVICE WATER PUMP (SWP) 25 INDICATING LIGHTS IN CENTRAL CONTROL ROOM PANEL

The locations of red and green indicating lights of SWP 25 were swapped in Panel SB-1 in the Central Control Room. No functional change was introduced by the swapping of the light locations, which was undertaken so that the light arrangement conformed to human engineering guidelines. No unreviewed safety question was involved.

SE-96-294-MD

INSTALL WELDING MACHINES IN PRIMARY AUXILIARY BUILDING

Three new welding machines were installed in the piping penetration area of the Primary Auxiliary Building. The purpose was to increase efficiency and reduce safety hazards. EMI and RF levels are less than EPRI guidelines. Equipment was seismically installed to prevent interaction with safety related equipment. Class 1E fuses provide isolation for the welding machines from the MCC. No unreviewed safety question was involved..

SE-96-295-MD

RELOCATION OF CONDENSER OUTLET WATER BOXES LEVEL ALARMS

Outlet water box level alarm magnetrols on each condenser section were replaced with new magnetic level switches which allowed a lower Level Alarm setpoint. This eliminated the need for a jumper that had been used to prevent the alarm from being annunciated continuously; the level in the boxes could not reach the old setpoint level because the variable weir is no longer variable and the vacuum in the outlet waterbox was not capable of increasing the water level high enough over the discharge level to reach the setpoint. Analysis showed there would be no appreciable negative impact on the tubes at the top of the condenser that are above the condenser outlet water box level. No unreviewed safety question was involved.

SE-96-296-DE

REPLACEMENT OF SEALS FOR BORIC ACID TRANSFER PUMPS

The Chesterton 123 mechanical seals in the boric acid transfer pumps were replaced with 155A seals. The new seals perform the same as the old seals, and their materials are identical except for the faces. The faces of the new seals are a material that performs better than the old material in borated water. No unreviewed safety question was involved.

SE-96-297-DE

REPLACE ACTUATING WASHER FOR 80' AND 95' AIRLOCK VALVES

The actuating washers for the 80' and 95' airlock Schrader valves were replaced with stainless steel washers that improve the operability of the valves. The stainless steel washers are compatible with the carbon steel parts in this environment and represent an improvement over the washers made of the old material. This change did not impact any system parameters, and seismic capability was not affected. No unreviewed safety question was involved.

SE-96-298-DE

REPLACEMENT OF PRESSURIZER HEATER TRANSFORMER 22

The 22 pressurizer heater transformer was replaced with a rebuilt pressurizer heater transformer. No cable was added, the connection remains the same, and there is no additional loading. The replacement transformer, which is approximately the same weight as the original, is bolted seismically to the floor. Seismic capability is retained. No unreviewed safety question was involved.

SE-96-302-DE

REPLACEMENT OF CORE EXIT THERMOCOUPLES

Core exit thermocouples were replaced with units whose characteristics met acceptance criteria and whose materials were compatible with the existing installation. The replacement thermocouples do not impact the operability of any system or equipment during normal, abnormal, or accident conditions. The change involved the replacement

of cable near the reactor but did not reroute vital cables within the cable trays. No unreviewed safety question was involved.

SE-96-303-TM

INSTALLATION OF DOCK OIL BOOM GUIDES

Guide tracks for the oil boom were mounted on the dock. The purpose of the tracks is to allow the boom, in any deployment, to move in accordance with the water level, which varies with the tide. The tracks have no adverse effect on the cathodic protection system, and there were no changes to any system located outside the screening devices. No unreviewed safety question was involved.

SE-96-304-PR, Rev. 1

SLUICING SLUDGE FROM HIGH-INTEGRITY CONTAINER

Waste from Unit 2 waste holdup tank desludging was prepared for disposal in accordance with Barnwell site criteria. Temporary connections to station water and to plant air sources were required, but each connection contained double check valves to prevent backflow of radioactive liquids. The equipment used to perform the work was non-Class A, non-seismic, and had no quality group; only water, resin, and sediments were involved. No unreviewed safety question was involved.

SE-96-305-TM

UNIT 1 BATTERY CHARGER JUMPER

A temporary jumper was installed to feed a Unit 1 fork lift battery charger. This did not affect significantly any bus loading or cables, and did not affect the operability of any Unit 2 system. The four conductor, #6 cable used was sufficient to carry the required load for the charger. No unreviewed safety question was involved.

SE-96-306-DE

REPLACEMENT OF CHEMICAL AND VOLUME CONTROL SYSTEM CHARGING PUMP PACKING

The existing packing in the CVCS pumps was replaced by Garlock packing, which was expected to improve the time between packing changes. The new packing material is compatible with boric acid and with reactor coolant systems, and the packing has performed consistently better than the original packing. No unreviewed safety question was involved.

SE-96-307-TM

USE OF SUMP TANK PUMP BYPASS FOR NEW PUMP INSTALLATION

The liquid in the primary auxiliary building sump tank was routed to the primary auxiliary building sump, bypassing the sump tank pumps. This was accomplished by installing a 2" hose downstream of valve LW-4847 and routing the hose to a floor drain in the immediate vicinity. The bypass was installed to permit the installation of new sump tank pumps. The building sump pumps discharge to the same location as the sump tank

pumps. This change did not create a reduction in the margin of safety. No unreviewed safety question was involved.

SE-96-308-TM

CLEARANCE OF A BLOCKAGE IN THE LAUNDRY WASTE PUMP SUCTION LINE

A station air utility hose rated at 250 psig was connected to a supply of station air regulated down to 75 psig and used to clear a blockage in the suction line to a laundry waste pump. A check valve was installed at the hose connection to the suction line to provide passive separation of the station air system and the laundry waste system. Materials of the equipment used were compatible with the materials of existing equipment. No unreviewed safety question was involved.

SE-96-309-DE

REPLACEMENT OF EHT MERCROID TEMPERATURE SWITCHES

Mercoid temperature switches were replaced with electrically and functionally equivalent Mercoid switches. The only difference is in the maximum probe temperature rating, which is 240 F for the new switches and 120 F for the old. Existing cable was utilized, and electrical and mechanical configurations were not affected. No unreviewed safety question was involved.

SE-96-310-DE

REPLACEMENT OF CHEMICAL AND VOLUME CONTROL SYSTEM CHARGING (CVCS) PUMP CROSS HEAD STUB SEALS

CVCS charging pump cross head stub seals were replaced with new seals whose performance is identical to the performance of the old seals. The new seals are compatible with the existing installation, and all materials used in them are compatible with charging pump oil and boric acid applications. The change to the new seals does not affect the operability of any system or equipment during normal, abnormal, or accident conditions. No unreviewed safety question was involved.

SE-96-311-DE

REPLACEMENT OF BACK COVER PLATES FOR BORIC ACID TRANSFER PUMPS

The back cover plates and seal chambers of the boric acid transfer pumps were replaced by integrated back cover plates. This eliminated two gasketed joints at each pump, thereby reducing potential leakage paths. The new plates and the old plates are made of identical materials, and there is no change in the performance of the pumps. No unreviewed safety question was involved.

SE-96-312-DE

CATION EXCHANGER AND MIXED BED TANKS LINING REPLACEMENT

The linings of the cation-exchanger and the mixed-bed tanks in the Water Factory were replaced with Enecon Palmer's ChemClad XC, which is used for application with steel and is suited to the chemicals and temperature parameters that will be experienced. There

was no change to any system operability in any mode, because this tank lining replacement involved a material equivalently suitable to the replaced material. No unreviewed safety question was involved.

SE-96-313-PR

CHANGE IN PROCEDURE ES-1.3 TRANSFER TO COLD LEG RECIRCULATION

Revision to ES-1.3 was made to ensure that the recirculation pumps do not cavitate. This is accomplished by closing or throttling discharge valves HCV-638 or HCV-640 on the residual heat removal emergency operating heat exchangers if required. The change applies to existing plant equipment that is operated in accordance with its design, and it does not represent a reduction in the margin of safety contained in the Technical Specifications or their bases. No unreviewed safety question was involved.

SE-96-315-MD, Rev. 1

PROVISION FOR MANIPULATOR CRANE IN-MAST SIPPING

The manipulator crane refueling mast was modified to accept the Westinghouse IMS system, a set of hardware that provides a means of performing quantitative leak testing of fuel assemblies during normal fuel handling operations. The set includes fittings permanently installed at the mast, as well as three portable components: a detection and recording module, a control module, and a pump and valve module. With the installation and use of the sipping system, neither the probability nor the consequences of a previously evaluated accident is increased. An accident of a different type is not created, there is no reduction in the margin of safety. No unreviewed safety question was involved.

SE-96-316-DE

REPLACEMENT OF COMPONENT COOLING WATER AND SPRAY ADDITIVE FLOW TRANSMITTERS

Flow transmitter FT-601 in the component cooling water system and flow transmitter FT-930 in the inlet leg of the spray additive system were replaced. The obsolete transmitters were replaced with new Foxboro transmitters in the N820 series. The new transmitters perform the identical function of the old units, no cables were added as a result of the replacement, and the new transmitters were installed using seismic supports supplied by Foxboro. No unreviewed safety question was involved.

SE-96-317-TM

CIRCULATING WATER PUMP BEARING FLOW ALARM

The alarm input for low bearing water flow to circulating water pump 25 was temporarily disabled. This input was inoperable and was masking other inputs to the category alarm. Monitoring of flow to the bearing was increased. System operability was not affected. No unreviewed safety question was involved.

SE-96-318-DE

REPLACEMENT OF CIRCULATING WATER PUMP DISCHARGE EXPANSION JOINTS

The circulating water pump discharge expansion joints were replaced with new joints. The new expansion joints have pressure and temperature ratings that exceed those of the old joints, while the vacuum rating of the joints is equal. The new joint materials are composite rubbers and are compatible with river-water service, and the steel retaining rings are galvanized. The new joints are located in the respective circulating water pump bays and have no interaction with safety related equipment. No unreviewed safety question was involved.

SE-96-319-TM, Rev. 2

TEMPORARY RELOCATION OF PERIMETER SECURITY LIGHTING CABLES

Existing below-grade security perimeter lighting cables that obstructed the installation of fish return lines and the clean-out pit were temporarily rerouted. In addition, retired cables were cut and removed. Two portable generators were provided for connection to the Appendix R portable, Residual Heat Removal (RHR) and charging pumps, ventilation for the duration of the period the lighting circuit that supplies the pump ventilation was disconnected to allow the temporary rerouting and reinstallation of the cables. The disconnection and reconnection of the cables was done when daylight was sufficient to preclude the requirement for artificial lighting for the perimeter security cameras. No unreviewed safety question was involved.

SE-96-321-MM

INSTALLATION OF FOREIGN MATERIAL EXCLUSION BARRIER FOR SPENT FUEL POOL

A foreign material barrier of nylon fabric was installed on the perimeter of the spent fuel pool by attachment of the nylon to the handrails and the floor. The nylon was attached to the handrails by use of grommets fabricated into its panels and stainless steel ties looped over the handrails. Attachment to the floor was through the use of Velcro. The self-adhesive Velcro that fastens the bottom of the nylon to the floor provides a gap-free exclusion barrier, but does not contact the pool water. No unreviewed safety question was involved.

SE-96-322-DE

REPLACEMENT OF UNIT 1 STACK FLOW TRANSMITTER

The obsolete Unit 1 stack flow transmitter was replaced with a newer model, as specified by the OEM. The materials in the new transmitter are the same as in the old, and there was no negative impact on any equipment or system as a result of the replacement. The new transmitter was installed in accordance with original design specifications. No unreviewed safety question was involved.

SE-96-323-DE

REPLACEMENT OF 600 AMP DISCONNECT SWITCH

An obsolete Gould 600-amp disconnect switch that provided protection and control to the fire diesel water tank heaters was replaced by a Siemens 600-amp Type LXD6(A) disconnect switch. The new switch is electrically and functionally equivalent to the obsolete switch and will function in the same manner. Electrical and mechanical configurations were not affected, and existing power supplies and vendor-supplied mounting hardware were utilized. The new equipment involved was a direct replacement of a failed obsolete switch. No unreviewed safety question was involved.

SE-96-324-TM

REPLACEMENT OF INOPERABLE SALINITY RECORDER IN CENTRAL CONTROL ROOM (CCR)

The obsolete L&N recorder in the CCR was inoperable and could not be repaired, so it was replaced by a new L&N recorder. The new recorder has the same dimensions as the old, and it was seismically mounted in the same space. The data points and the alarms generated from the new unit are the same as those from the old. The power inputs for the old recorder were disconnected and taped together to allow other equipment on the circuit to be powered up, and the new recorder was powered by an extension cord to an outlet inside the Unit 1 flight panel. No unreviewed safety question was involved.

SE-96-325-EV

ANALYZE FAN COOLER UNIT DUCTING RELIEF VALVE OPENING SETPOINT

An analysis was performed to achieve consistency in documents that describe the setpoint for the relief dampers. As a result, the setpoint stated in the UFSAR was changed from 1 psi to a value of <5 psi. A reduction in the margin of safety occurred as a result of the change, but this is acceptable because the ductwork has been analyzed and found to be capable of withstanding a differential of 15 psi without failure. The margin of safety in Technical Specification 3.3.B and its bases is not reduced, since the ductwork remains protected from collapse. No unreviewed safety question was involved.

SE-96-326-PR

PRESSURE DECAY TESTING OF CITY WATER PIPING TO AUXILIARY FEEDWATER (AFW) PUMPS

The underground portion of the city-water backup supply to the AFW pumps was pressure-decay tested. The test did not open or render non-functional any portion of the city water piping, but did require a 72-hour LCO during which an anomaly requiring city water use would have terminated the test and returned associated valves to their normal positions. The primary supply from the condensate storage tank to the AFW pumps was operable and capable of performing its safety-related function. No unreviewed safety question was involved.

SE-96-328-TR

INSTALL ELBOW RESTRAINT FOR 2" LINE # 183

A pipe restraint was installed to restrict movement of line #183 in axial and radial directions in the unlikely event that an area of seepage observed on an elbow weld would propagate and result in the complete failure of the weld. (The area of seepage, which normally sees static conditions, was subjected to ASME NDE tests that gave satisfactory results.) Line #183, which supplies the refueling water purification pump, comes off the 16" line that feeds the safety injection system and residual heat removal pumps during the injection phase of the design basis accident. The elbow restraint on line #183 is a temporary modification, and safety injection operability was not affected. A calculation was performed to ensure the stresses due to sustained and occasional loads are acceptable with the restraint installed. No unreviewed safety question was involved.

SE-96-329-DE

REPLACEMENT OF N₂ MANIFOLD VALVE

The nitrogen system manifold valve was replaced by a new valve that performs the same functions as the old valve, is operated in the same manner as the old valve, and is made of materials compatible with the existing installation. The new valve was installed in the piping in the same manner as the old valve to maintain seismic capability of the system. The new valve is designed to meet the 2500 psig maximum operating pressure of the system and meets or exceeds all specifications of the old valve. No unreviewed safety question was involved.

SE-96-330-DE

REPLACE INSTRUMENT AIR SYSTEM FLOW ORIFICE

Flow orifice FE-1112 was replaced with a new flow orifice that functions and operates in the same manner as the old flow orifice. The new flow orifice is the same as the old in form, fit, and function, and it was installed in the same manner to maintain seismic capability. The materials of the new flow orifice are acceptable for use in the instrument air system. No unreviewed safety question was involved.

SE-96-333-TM

JUMPER-OUT FEEDWATER HEATER (FWH) LOW LEVEL ALARM DURING LEVEL CONTROL VALVE REPAIR

LCV-1118 had failed open and resulted in the draining of FWH 23A. This caused an alarm and masked the level alarms for other feedwater heaters. A jumper was installed to allow the operators to receive high and low level alarms for the other heaters and high level alarms for heater 23A. The jumper did not affect any instruments used during an accident, for the feedwater heaters are not used in accident analyses. The jumper tie wrap was compatible with the Magnetrol sensor, and there was no possibility of shorting. No unreviewed safety question was involved.

SE-96-335-TM

**REMOVAL OF ERRATIC DATA POINTS FROM STEAM GENERATOR (SG) THROTTLE
CROSSOVER PRESSURE RECORDER**

Four erratic data points that were unavailable for trending or capable of providing any accurate data points were removed from scan on the SG throttle crossover pressure recorder. The removal of the points was accomplished by reprogramming the recorder, so the activity did not affect any system parameters or involve the introduction of any new materials. The reprogramming did not add any load to any Unit 2 bus, vital or non-vital, and the seismic integrity of the recorder was not altered. No unreviewed safety question was involved.

**SUPPLEMENTAL
10 CFR 50.59(b) REPORT OF
CHANGES, TESTS, AND EXPERIMENTS
MARCH 1998**

SAFETY EVALUATIONS DATED IN JANUARY THROUGH JULY 1997

SE-97-001-TM

TEMPORARY REPAIR OF HEAT TRACING

The heat tracing for the deluge supply piping to the primary auxiliary building charcoal filter was temporarily repaired. The repair consisted of a jumper across a corroded and non-conducting states link. The jumper restored the function of the heat tracing, to provide freeze protection to the line and assure operability of the deluge system. No unreviewed safety question was involved.

SE-97-002-TM

TEMPORARY REPAIR OF FIRE WATER STORAGE TANK HEATERS

The overtemperature switches for the fire water storage tank were operating improperly, cutting off power to the tank heaters. They were temporarily bypassed to allow the heaters to protect the tank against freezing. Normal temperature control for the tank was not affected. Water temperature in the tank was logged every six hours to ensure that a temperature increase would be detected. No unreviewed safety question was involved.

SE-97-004-MD

PROVIDE ADDITIONAL SECURITY ZONES

Additional security system E-Field and FTA zones were provided. This reduced the number of cameras associated with each zone, allowing the monitor control system to display automatically all the cameras associated with an alarm. Security operator capability to assess intrusion alarms was enhanced. The system does not interface with any safety related components and systems. No unreviewed safety question was involved.

SE-97-005-MD

FLOW INTEGRATOR

A temporary modification provided the control room operators with a running total of the amount of letdown water diverted from the reactor coolant system via LCV-112A (see SE-96-029-TM). The design of the temporary modification was reviewed, verified and made permanent. The letdown flow channel is designated as a post-accident monitoring instrument channel. An isolation circuit was installed to isolate the flow circuitry from the integrating circuit. The horn was replaced to provide a unique sound. An electric failure in the flow integrator circuit will not affect the flow circuitry. No unreviewed safety question was involved.

SE-97-006-MM

FUEL OIL MOAT ROOF INSTALLATION

Steel corrugated roofs were installed over the moats at the truck transfer areas for fuel oil for the emergency diesel generators and for gas turbine GT-1. The roofs are supported by free standing steel structures. The roofs minimize accumulation of rain water in the moats. This modification has no effect on the safety related functions of any plant system. No unreviewed safety question was involved.

SE-97-007-MD

UNIT 1 CASK WASH PIT SUMP PUMP REPLACEMENT

The Unit 1 Cask Wash Pit Sump Pump was replaced with an equivalent pump. A local "ON-OFF-AUTO" control station and float control were also provided. There are no safety related functions for this pump. The system was restored to the original design intent. No unreviewed safety question was involved.

SE-97-009-DE

INSTRUMENT AIR PREFILTER DRAIN VALVE REPLACEMENT

The drain valve on the instrument air dryer prefilter was replaced. The valve automatically drains the prefilter at timed intervals. The new valve provides the same functions as the original valve and operates in the same manner. Seismic capability was maintained. No unreviewed safety question was involved.

SE-97-010-TM

TEMPORARY FEED TO BATTERY CHARGER

A temporary feed was provided to the main battery charger of gas turbine GT-1. It did not affect and was not affected by any mode of plant operation. The temporary power source is from Unit 1 and is not safety related. The cable used was not in or near any vital cable tray. It is not required to be seismic. No unreviewed safety question was involved.

SE-97-011-MD

CITY WATER BACKFLOW PREVENTION

Three 8 inch lines supply city water to the plant's city water storage tank. A new backflow preventer and meter were placed in each of the three lines. The backflow preventer provides assurance that contaminants cannot reach the public water supply. The plant's use of city water was not impacted. No unreviewed safety question was involved.

SE-97-013-DE

POLAR CRANE PENDANT REPLACEMENT

The polar crane control pendant was replaced, along with its track, rollers, cabling, etc. This was an equivalent replacement using materials equal to or better than the original installation. The installation is not Class A or Class 1E, and not environmentally qualified. The new components have been designed for seismic loading. No unreviewed safety question was involved.

SE-97-014-PR

DRAIN CHARCOAL FILTER DOUSING LINE

A section of piping in the Containment Spray System was drained. The pipe section had been identified as potentially subject to overpressurization by thermal expansion of contained water in the event of a loss of coolant accident or a steam line break accident.

The pipe section supplies water from the containment spray system to the charcoal filter dousing sprays, which are provided to extinguish fires which might occur in the charcoal filters following a loss of coolant accident. The line was drained by removing a blind flange and opening the drain valve. The valve was then reclosed and the blind flange reinstalled. The safety related function of the system was not affected. No unreviewed safety question was involved.

SE-97-015-TM

TEMPORARILY DISABLE FIRE WATER STORAGE TANK HEATER

A temporary power supply was provided for the two fire water storage tank heaters while Substation A was being refurbished. Because of the limited capability of the supply, one heater was disconnected. The temporary modification allowed one heater to operate to maintain the water above 45° F, assuring the operability of the diesel fire pump. Compliance with the Fire Protection Program Plan and 10CFR50 Appendix R was maintained. No unreviewed safety question was involved.

SE-97-016-DE

SECURITY SYSTEM CARD READERS REPLACEMENT

Obsolete security entry/exit card readers were replaced. The new readers function the same as the old ones and have no safety-related function. No unreviewed safety question was involved.

SE-97-018-PR

CLOSED COOLING WATER SYSTEM PH CONTROL

Procedures were changed to use boric acid to maintain pH in the range of 9-10 for the Conventional Plant Closed Cooling Water System. The system provides cooling water to the main boiler feed pump pedestals, the heater drain pumps, the station air compressor, the main condensate pumps, and various sample coolers. It has no safety related function. The change enhances corrosion protection thus limiting heat exchanger fouling. The change does not adversely affect the safety related function of any system. No unreviewed safety question was involved.

SE-97-020-TM

GAS TURBINE BATTERY CHARGER

A temporary electric power feed was installed to provide 120 VAC power to the black start battery charger of Gas Turbine GT-1. It utilized a Unit 1 service connection. No Class 1E equipment was affected. No unreviewed safety question was involved.

SE-97-021-DE

REPLACE LIGHTING FIXTURES

Incandescent lighting fixtures in the plant were replaced with high intensity fixtures. The affected fixtures are not Class A and are not connected to the emergency diesel generators

or station batteries, and do not impact them. They are seismically restrained. No unreviewed safety question was involved.

SE-97-022-TM

PURGE HYDROGEN LINE WITH NITROGEN

It was necessary to replace a hydrogen valve which had a minor leak. The line containing the valve was purged with nitrogen before replacing the valve, in accordance with safety procedures. A jumper was provided to connect the purge lines. The affected hydrogen system is associated with the main generator and has no safety function. Appropriate safety precautions were observed. No unreviewed safety question was involved.

SE-97-023-MM

REPLACE DIODES IN NITROGEN CONTROL CIRCUIT WITH RESISTORS

This modification makes permanent a previously installed temporary modification (SE-96-262-TM). Resistors were installed in place of diodes in the control circuit for the condensate storage tank nitrogen supply. Electrical spikes that interfered with operation of the Controlotron Flow Computer were minimized. There was no effect on the function of any safety related system. No unreviewed safety question was involved.

SE-97-024-DE, SE-97-025-DE, SE-97-026-DE, SE-97-027-DE, and SE-97-028-DE

PIPING REPLACEMENTS

Several sections of carbon steel and chrome-moly steel piping were replaced with stainless steel piping. They included:

- Steam trap piping in the main steam and extraction steam systems,
- Main Steam Reheater 21B and 22B drain line piping,
- Moisture Preseparator Tank outlet piping,
- Reheater Drain Tank drain piping, and
- Extraction steam line piping to feedwater heaters 25.

The new stainless steel piping has a greater resistance to flow accelerated corrosion than the piping that was replaced. The weight of the piping was increased by about 2%. Analysis showed that the design capability of the supports was maintained. The system is non-seismic and will not adversely affect impact any safety related system or equipment in a seismic event. No unreviewed safety question was involved.

SE-97-029-TM

SUPPLY DEMINERALIZED WATER TO UNIT 1 CONDENSATE STORAGE TANK

A temporary supply of demineralized water to the Unit 1 Condensate Storage Tank was provided to meet the large demand for demineralized water during plant startup. The temporary supply consisted of a portable skid-mounted demineralizer and hoses. Water from the fire protection system was utilized. Flow from the fire protection system was about 80 gpm, which is less than the amount that can be removed from the system without adversely affecting it. The capacity of the fire protection system was more than adequate to handle fire contingencies. No unreviewed safety question was involved.

SE-97-030-PR

COMPONENT COOLING SYSTEM pH CONTROL

Procedures were changed to use boric acid to maintain pH in the range 9-10 for the Component Cooling System. The system provides cooling water to various systems and components. The change enhances corrosion protection thus limiting heat exchanger fouling. The change does not adversely affect the safety related function of any system. No unreviewed safety question was involved.

SE-97-031-TM

CONTAINMENT PRESSURE RELIEF VALVE TROUBLESHOOTING

Three valves are in series in the Containment pressure relief line. One of them, PCV-1190 became inoperable. In accordance with the Technical Specifications, the other two were deactivated by isolating their instrument air supplies to assure that containment integrity was maintained. This safety evaluation assessed temporary modifications to allow troubleshooting on the valve. The overload heaters were removed from the control circuit for the Pressure Relief Fan, and a wire was added to jumper the limit switch positions of the other two valves in the pressure relief line. These changes allowed PCV-1190 to be operated for troubleshooting without operating the fan or the other two valves. Containment isolation requirements were met. No unreviewed safety question was involved.

Jumper 97-20 (Reuse of SE-94-005-TM)

TEMPORARY ELECTRIC SPACE HEATERS

Electric space heaters were used during cold weather operations to maintain acceptable ambient temperatures. Those used in safety related areas were seismically restrained. Heaters were positioned so as not to impact operating equipment or combustible materials. They were powered from service receptacles which were not directly connected to vital busses. They did not interface with any plant system or equipment used to prevent or mitigate an accident. No unreviewed safety question was involved.

SE-97-034-DE

REPLACE SPRINGS ON MAIN FEEDWATER REGULATOR VALVES

The actuator springs on the main feedwater regulator valves were replaced. The new springs provide better control characteristics and additional force margin to ensure valve closure on receipt of a feedwater isolation signal. The valve function is unchanged. The replacement springs meet or exceed design criteria for the system. No seismic equipment is involved. No unreviewed safety question was involved.

SE-97-038-DE

MANWAY GASKET MATERIAL REPLACEMENT

The gasket material for the moisture preseparator manways was changed. The new material meets or exceeds the original gasket specifications. This type gasket has been successfully used on other components. The preseparator manways are not Class A or seismic. No unreviewed safety question was involved.

SE-97-039-TM

TEMPORARY SUMP PUMP IN WASTE NEUTRALIZATION TANK PUMP PIT

A temporary sump pump was installed in the waste neutralization tank pump pit. It was connected to the station air and waste neutralization piping by hose and piping. This temporary modification does not impact any system's design pressure, temperature, flow rate or other parameter. Materials of the temporary modification are compatible with the systems they connected to. No unreviewed safety question was involved.

SE-97-041-TM

TURBINE-GENERATOR OIL LEAK COLLECTION

Drip catchers and drain hoses routed lube oil leakage to the Main Turbine-Generator Lube Oil System. The purpose was to contain existing documented leakage. This was essentially a housekeeping device and had no impact on the plant's mode of operation. No unreviewed safety question was involved.

SE-97-042-DE

REPLACEMENT OF POWER SUPPLY

The power supply for the Digital Metal Impact Monitoring System was replaced. Electrical system loads were not increased. The replacement did not impact the operability of any system or equipment during normal, abnormal, or accident conditions. Seismic capability was not affected. No unreviewed safety question was involved.

SE-97-043-TM

SUPPLY WATER FOR STEAM GENERATOR SLUDGE LANCING

A hose was connected to supply water from a service connection of the Primary Water System to the sludge lancing skid. This hose was used at cold shutdown, and personnel were in continuous attendance while it was in use. The change did not impact operability of any system. No unreviewed safety question was involved.

SE-97-044-TM

PROVIDE POWER SUPPLY

A supply of 480 V power in the containment was provided through existing conduit and a welding receptacle to a duraline power distribution center. The duraline was permanently installed inside containment and seismically analyzed. The maximum load has been shown by analysis to not affect the 480 V bus. Protection for the 480 V system against an

electrical fault is provided by a safety related breaker. No unreviewed safety question was involved.

SE-97-045-EV

STEAM GENERATOR MANWAY SEALING SURFACE REPAIR

The gasket seating and flange surfaces of the secondary side manways of the steam generators had pitted. Material was removed from the surface to restore its design condition. The manufacturer determined the amount of material that could be removed and provided instructions for the work. The repair is in accordance with section XI of the ASME code as well as the original design criteria and code (ASME III). No unreviewed safety question was involved.

SE-97-046-PR

CONDENSATE AND FEEDWATER SYSTEMS FLUSH

With the reactor in the cold shutdown mode, the condensate and feedwater systems were filled, vented, flushed and drained. The system was isolated from the steam generators during this work. The procedure did not alter the response of any equipment required to function during any analyzed accident or transient in the cold shutdown mode. Containment integrity and core reactivity were not affected. No unreviewed safety question was involved.

SE-97-047-TM, Rev. 1

TEMPORARY STRAINER FOR HEATER DRAIN TANK

Metallic grit was deposited in the condensate and feedwater systems by a shotblast operation on the high-pressure turbine casing. To remove it, a level control valve was removed from a four inch bypass line from the heater drain tank to the condenser, and a basket strainer was installed in its place. The grit was removed by recirculating part of the condensate through the strainer. After completion of the grit removal, the system was returned to its normal configuration. Failure of the strainer was considered, and precautions taken to prevent it. If the strainer had failed, the only consequence would be the re-release of the accumulated grit to the condensate system. Level in the tank was controlled by valves other than the one removed. This change did not impact the normal operation of any system or equipment. There are no interfaces with any Class A systems. No unreviewed safety question was involved.

SE-97-048-DE

REPLACE VALVE 6EX-27

Valve 6EX-27 was replaced. The new valve operates in the same manner as the original. System parameters were not changed. The valve is not located in a seismic area and does not interact with any seismic equipment or systems. No unreviewed safety question was involved.

SE-97-050-DE

INSTRUMENT AIR RELIEF VALVE REPLACEMENT

A relief valve in the instrument air system was replaced. As compared to the original, the replacement valve has a somewhat larger flow capacity and a lower blowdown characteristic, which are more desirable qualities for the application. The replacement will operate in the same manner and provide the same functions as the existing valve. It is included in the preventive maintenance program and is tested to ensure proper operation. Seismic capability was maintained. No unreviewed safety question was involved.

SE-97-051-TM

TEMPORARILY BLOCK SOURCE RANGE CHANNEL

A temporary blocking strip was installed on a relay associated with the source range channels. One of the two source range channels had been removed from service in accordance with normal plant procedures. The blocking strip did not affect the operability of source range instrumentation, but did maintain the availability of (unmask) the High Flux at Shutdown alarm from the operable source range channel. No new failure modes were introduced. No unreviewed safety question was involved.

SE-97-052-DE

GATE REPLACEMENT

A carbon steel personnel gate inside containment was replaced with a stainless steel gate. Seismic capability was maintained. There was no impact on operability of any system. No unreviewed safety question was involved.

SE-97-053-TM

TEMPORARY FEED TO SLUDGE LANCE AIR COMPRESSORS

Temporary electrical cables were run to supply power for air compressors associated with the equipment used for sludge lancing the steam generators. The feed was used only with the unit in cold shutdown. Power was taken from the Vapor Containment substation, which was constructed to supply temporary feeds, and has no safety related function. The breaker and other components have adequate capacity. No unreviewed safety question was involved.

SE-97-054-DE and SE-97-056-DE

MODIFY INTERNALS IN AUXILIARY FEEDWATER VALVES

Slight dimensional changes were made to the internals of valves FCV-405-A, B, C and D, and of FCV-406-A, B, C and D. They are in the Auxiliary Feedwater System. The changes were for the purpose of increasing reliability by stabilizing the valve internals and reducing misalignment. The changes did not affect the pressure boundaries or create new failure modes. Seismic qualification was maintained. System operability was not impacted. No unreviewed question was involved.

SE-97-057-DE

CONTROL AIR FILTER-REGULATOR REPLACEMENT

Filter-regulators that supply control air to (1) the control system for the steam to the turbine driven auxiliary feedwater pump turbine, and (2) the steam generator blowdown isolation valves were replaced. The new filter-regulators perform the same functions as the originals. Operability and safety related functions were not affected. Seismic capability of the systems was maintained. This replacement did not involve an unreviewed safety question.

SE-97-058-DE

REPLACE STEAM HEADER DRAIN VALVE

Valve MS-94-16 was replaced. This valve is the drain valve for the auxiliary boiler feedwater pump steam header. The replacement valve is similar to the original valve and meets or exceeds the specifications for the original. It does not impact the system pressure boundary under seismic conditions. No unreviewed safety question was involved.

SE-97-061-TM

USE STATION AIR FOR PRESSURIZING FEEDWATER HEATERS

A hose was temporarily connected to supply station air to the pressurize the shell side of a feedwater heater. The heater had previously been removed from service. Overpressurization was not a concern since station air pressure is 110 psi, while the heater relief valves are set to 250 psi. No safety related equipment was involved. No unreviewed safety question was involved.

SE-97-062-PR

FLUSH FEEDWATER HEATER SHELL

With the feedwater system out of service, the shell of feedwater heaters 25A, 25B and 25C were flushed to remove possible grit material. The procedure consisted of partially filling the heater shell with condensate, pressurizing, blowing down component and instrument drains, and draining the heater shell. Samples were taken. The feedwater heaters have no safety related function. No unreviewed safety question was involved.

SE-97-063-TM

TEMPORARILY INSTALL FILTERS IN STEAM GENERATOR BLOWDOWN SAMPLE LINES

A particulate filter was temporarily installed in each steam generator blowdown sample line to allow quantification of the amount of particulates in each blowdown. The sample system has no safety related functions and is isolated by the steam generator blowdown containment isolation valves. The filters did not impact the safety related functions of any system. No unreviewed safety question was involved.

SE-97-064-EV

STEAM GENERATOR SECONDARY SIDE FOREIGN OBJECTS

A foreign object search and retrieval effort identified several objects in the shell sides of the steam generators. The potential safety impact of operation of Unit 2 with these objects remaining in the steam generator secondary sides was assessed. The evaluation demonstrated that continued operation of the steam generators with the foreign objects remaining in them would not have any adverse effect on the pressure boundary integrity. No unreviewed safety question was involved.

SE-97-066-PR

SECONDARY SIDE TRANSMITTER FLUSHING

A new system operating procedure, SOP 29.18, was developed to support the plant startup following the Foreign Material Exclusion Outage. The procedure gives specific guidance on how to blow down various transmitters, uses existing piping and valving, and requires that the blow down effluent be sampled for foreign material. No equipment was added under this new procedure. The safety functions of the various transmitters were not altered and no new failure modes were created by this procedure. There was no increase in the consequences of equipment malfunctions previously evaluated. No unreviewed safety question was involved.

SE-97-067-TM

DURALINE POWER SUPPLY FROM WELD RECEPTACLE

The purpose of this jumper is to provide 480 volt AC power from MCC 28 breaker 1B through existing conduit and welding receptacle to a Duraline power distribution center. The MCC 28 breaker 1B is designed and analyzed to supply up to 100 Amps of current to four welding receptacles. Should the current exceed 100 Amps, the fuses in the breaker 1B would interrupt the current. The Duraline was permanently installed in the containment and analyzed for all accidents. There is no change to the safety related function of this system and the margin of safety has not been reduced. No unreviewed safety question was involved.

SE-97-068-DE

BALSTON FILTER REPLACEMENT

A new Balston filter was installed for the Main Boiler Feed Pump. The new filter is an upgrade of the original. It functions in the same manner and does not impact the Instrument Air System or Main Boiler Feed Pumps. It is not seismic and is not located in an area with safety related equipment. There was no change to electrical systems or loading. No unreviewed safety question was involved.

SE-97-069-TM

DIGITAL METAL IMPACT MONITORING SYSTEM (DMIMS) MULTI-CHANNEL RECORDER

A multi channel signal recorder was seismically installed in the Central Control Room next to the DMIMS cabinet. Signal cables were connected to the signal output jacks on the DMIMS unit to record signals for analysis by Westinghouse during plant start-up. There is no safety related function associated with this equipment. The normal function of the DMIMS unit will not be altered by connecting a multi-channel recorder to the system. No failure modes or margin of safety issues are associated with this jumper. No unreviewed safety question was involved.

SE-97-070-PR

HEATER DRAIN TANK SAMPLE STRAINER

Temporary Operating Instruction TOI-288 was prepared to inspect strainers between Heater Drain Tank drains and the Condenser for grit material with the system in service. The strainer was designed for pressures exceeding the pipe design. If the strainer clogs, a seam will tear and the grit will be released back into the condenser. This will occur at about 30 psid. TOI-228 limits maximum operation pressure drop to 13 psid. This instruction does not impact any safety related equipment. No unreviewed safety question was involved.

SE-97-071-DE

REPLACEMENT OF CHEMICAL AND VOLUME CONTROL SYSTEM (CVCS) LETDOWN ISOLATION VALVE

Replacement of the CVCS Isolation Valve did not introduce any new failure mode. Material of the new valve is the same as the original. The change does not impact the plant's operational mode nor any system parameters. Both the original and replacement valves are of the same electrical rating so there is no impact on electrical systems or loadings. The original was both Class A and seismically installed, the new is likewise. No unreviewed safety question was involved.

SE-97-072-TM, Rev. 1

INSTALLATION OF FERRITE BEADS

Installation of ferrite beads at various locations on the Nuclear Instrumentation System (NIS) cables were used to minimize induced electrical noise in the cables. They had no other effects on the NIS cable. The beads did not increase any electrical loads or have any impact on any instrument response times or characteristics. The ferrite beads were seismically restrained and did not impact the seismic capability of the NIS or any other safety related equipment or any plant structure. There was no impact to the plant's mode of operation and no new failure modes were introduced by this change. All materials with this change were compatible with the original installation. No unreviewed safety question was involved.

SE-97-073-DE

REPLACEMENT OF LETDOWN ISOLATION VALVE

Replacement of Chemical Volume and Control System Isolation Valve SOV-201 introduced no new failure mode. Material of the new valve is like the original and there is no impact on any of system's parameters. Both the original and replacement valves are of the same electrical rating so there is no impact on electrical systems or loadings. This change has no impact on any Class 1E equipment. No unreviewed safety question was involved.

SE-97-074-PR

FEEDWATER REGULATOR EXERCISES

Temporary Operating Instruction TOI-230 was developed for the purpose of exercising the main and low flow feedwater regulating valves while at power, following the foreign material exclusion outage. The procedure gives guidance on how to operate existing plant controls without placing the equipment outside its Final Safety Analysis Report design basis. None of the existing instrumentation or controls were altered by this TOI. There was no impact on any electrical system or electrical load. The TOI used existing plant equipment to induce valve movement as designed. No unreviewed safety question was involved.

SE-97-075-EV

SCAFFOLD STORAGE IN THE CONTAINMENT

Galvanized scaffolding was stored inside the crane wall at the 46' elevation of the containment. The scaffolding was seismically restrained and attached to seismically qualified structural steel. It would remain in place during a seismic event and it did not adversely affect any safety related structures, systems or equipment. The small amount of hydrogen generated by the presence of zinc in the galvanized material is insignificant and is well within accident analysis assumptions. The added amount would not challenge or have an adverse affect on the capacity of the Hydrogen Recombiners and the Containment Venting System. No unreviewed safety question was involved.

SE-97-078-DE

TANK REPLACEMENT

The original Degassing Pump Vacuum Receiver Tanks, fabricated of carbon steel and operated in a city water environment, were replaced with stainless steel tanks due to corrosion problems. Both the original and replacement tanks meet the requirements of the ASME Boiler and Pressure Vessel Code, Section VIII. They are designed for 50 psig at 200 F. The replacement does not impact design pressures, temperatures, or flowrates and the material change was determined to be negligible. No new failure mode was introduced and there was no affect on the operability of the Circulating Water System or any other system. No unreviewed safety question was involved.

SE-97-079-DE

VALVE REPLACEMENT

An obsolete Crane valve, MS-1390 (PT-412A root stop), was replaced with a similar Velan valve, which conforms to or exceeds the Crane valve specification. No new failure mode was introduced and there was no impact on the plant's mode of operation. The replacement valve is not electrical and not in the ISI/IST Program. No unreviewed safety question was involved.

SE-97-080-PR, Rev. 1

FLUSHING STEAMLINES

Temporary Operating Instruction TOI-231 was utilized to provide guidance to perform a steam flush on the steam leads to 22 Auxiliary Feedwater (AFW) Pump. It was used in a plant mode where neither the 22 AFW Pump nor the Over Pressure Protection system was required to be operable. An operator was stationed at either MS-41 or MS-42 to prevent an excessive cooldown if the steam flow could not be isolated at the pump. Also the internals of PCV-1139 were removed. The TOI further restricted Reactor Coolant System T_{avg} to between 330 degrees F and less than 350 degrees F during the flush or terminate action. There was no impact on Class 1E equipment, electrical systems or electrical loads. It introduced no change to normal or design basis response of the AFW System as the TOI is temporary and 22 AFW Pump was restored to original configuration prior to return to service. No unreviewed safety question was involved.

SE-97-081-DE

REPLACEMENT OF PCV-1139

Replacement of PCV-1139 represented an equivalent change of an existing plant component. The system's parameters were not impacted and no new failure mode introduced. This change was mechanical and did not impact any electrical system or loading. The new valve is seismically restrained as the original. It meets or exceeds all existing design criteria for the "high energy" system on which it is installed. Two additional welds were added to the ISI/IST Program but no new requirements result from this change. No unreviewed safety question was involved.

SE-97-082-TM

FLOW INDICATOR IN HYDRAZINE ADDITION LINE TO CONDENSATE STORAGE TANK (CST)

This jumper replaces flow indicator FI-7268 in Hydrazine Addition Line to the CST. It is a stainless steel braided hose of compatible material as the original and has a pressure rating in excess of the flow transmitter's. The only impact the jumper has on the system is the loss of the flow indication. This is not used in the chemical addition procedure. Should flow rate be required, it could be calculated by using the Hydrazine Mixing Tank level indication and elapsed time. This jumper had no impact on any Class 1E equipment and no impact on any electrical systems or loads. It was completely contained in the Turbine Hall. No unreviewed safety question was involved.

SE-97-087-DE

CHECK VALVE REPLACEMENT DISK

Disks for check Valves 838A-D, located inside the containment, were replaced by disks made of a different material, which was permitted by the valve specification. There was no impact on the operability of any system or equipment and no new failure modes were created. This change did not alter any existing conditions. No unreviewed safety question was involved.

SE-97-087-TM

HYDRO RIG INSTALLATION

This jumper, located at 22 Auxiliary Boiler Feed pump, allowed the hydro test of PVC-1139 while the plant was in cold shutdown. Completion of the hydro was required prior to returning the system to operability. The hydro rig hoses and fittings were compatible with system materials. A failure of the hoses at either end of the hydro rig could have occurred, and was therefore only utilized with personnel in attendance. It did create a high energy condition in a small section of main steam piping which was contained within a previously evaluated test boundary. No unreviewed safety question was involved.

SE-97-088-DE

REPLACEMENT OF HANGER BRACKET BOLTS

Hanger bracket bolts for 6" Velan valves 838A-D for Residual Heat Removal to Reactor Coolant System, located inside the containment, were replaced. The new hanger bracket bolts were suitable for this application and did not affect the seismic capability of the check valves. No unreviewed safety question was involved.

SE-97-091-TM

VENT HOSE FOR IGNITION OIL TANKS

This change redirected the vent path of the Ignition Oil Tank vent lines to prevent vapors from entering the offices during tank filling operations. The new tubing was run so the operator could verify vent flow during tank filling operations. It also provided for visual inspection of fluid accumulation and a method of removal. A device was located at the outlet of the hose to collect any condensed fluid and prevent it from entering the environment. The materials and design of the new tubing, which is compatible to the reducer outlet in the installed vent piping, added a negligible back pressure to the oil tanks and was resistant to the oil fumes and outside weather. No unreviewed safety question was involved.

SE-97-095-DE

REPLACEMENT OF BREAKER SWITCH GEAR HOISTS

The new DB breaker hoists are functionally equivalent to the original Westinghouse 480V DB breaker switch gear hoists. It features a drive motor with controls in lieu of the old design which required manual operation. The motors on the new hoist are plugged into nearby 120VAC receptacles only when in use and are unplugged when not in use. There is no impact to electrical systems or change in electrical loadings. A new failure mode introduced by this change is failure of the motor to perform its function. Should this happen, operation per the previous method remains available. A cut off switch prevents over lifting. Failure of the cut off switch would not result in damage to the lifting cable since the motor cannot develop enough torque to snap a 2000 lb. test cable. The new hoist is mounted to Class 1 E equipment in the same configuration as the original which provides seismic restraint. No unreviewed safety question was involved.

SE-97-097-PR

HEATER DRAIN TANK AND MOISTURE PRESEPARATOR TRANSMITTER FLUSH

Temporary Operating Instruction TOI-233 was used to blow down various flow, level, and pressure transmitters on the Heater Drain Tank and Moisture Preseparators. The purpose was to prevent a secondary system transient initiated by transmitter malfunction due to foreign material in the transmitters. No automatic actuation signals for any safety related equipment was affected and no safety system was disabled. Secondary transmitters that control valves or components in automatic were placed in manual prior to blowing down the transmitter, to ensure normal system design parameters were maintained and transients were not introduced into the system. No unreviewed safety question was involved.

SE-97-099-DE

VALVE REPLACEMENT PARTS

The disc, liner and piston rings for valve MS-41 were replaced with parts of a different material. The new replacement parts were otherwise identical to the original parts. This valve is not electrical and there were no cables added or rerouted. All functions of the valve were maintained. No unreviewed safety question was involved.

SE-97-103-PR

VALVE LEAK AND HYDRO TEST

The leak test and hydro test for valve 839 H were performed, in accordance with an approved procedure, using a test rig and test connections to the Reactor Coolant System (RCS) that were designed for this purpose. The seat leakage test was performed with the RCS below 350 degrees F and affected safeguards equipment was not required to be operable. The hydro portion was performed above 350 degrees F and all required safeguards equipment was operable. There were no electrical components manipulated or altered by this test. No unreviewed safety question was involved.

SE-97-104-TM

VALVE POWER CONNECTION

A jumper was installed to bypass an inverter and supply 120V AC directly to fire protection valve FP-588. The on/off switch was located on the door of the Fire Detection System Junction Box located on the west wall of the Fan Room 72' EL. Administrative controls ensured that the Deluge Valve would be manually operated if required to allow water to flow from the Fire Deluge System to the individual charcoal beds. The charcoal beds are required to provide filtration during ventilation or purge during a fire in the Primary Auxiliary Building, Boric Acid Building or containment. Upon restoration of the system the on/off switch was removed and the hole covered with a metal plate. The Appendix R Program was not impacted by this change. No unreviewed safety question was involved.

SE-97-105-DE

INSTALL NEW STEM LOCK ARRANGEMENT

Installation of the Copes-Vulcan Series 1000 Quick Connect Stem Couplings did not impact the operability of any system or equipment. The new materials were compatible with the original installation and did not impact any system's design parameters. The only postulated failure mode of the quick connect coupling was loosening of the stem locking clamp. This was similar in both probability and circumstances to the original failure mode of loosening of the stem lock bar and no new failure modes were introduced. The change was mechanical in nature, maintained the seismic capability of the systems and components per original plant design criteria, and did not involve any Class 1E equipment. No unreviewed safety question was involved.

SE-97-106-TM

PLUG NUCLEAR SERVICE BUILDING (NSB) SEWAGE LINE

This change plugged a sewage line from the NSB. Previously the line was a dead leg and its inputs had been plugged. However, it was tied in to live drains on the conventional side which periodically became plugged with sewage and caused water to backfeed into the dead leg in the NSB. The new plug prevents this backfeed condition with no new failure mode being introduced. This change did not affect the operability of any system nor the plant's mode of operation. No unreviewed safety question was involved.

SE-97-107-PR

TEMPORARY REPAIR TO EXTRACTION LINE DRIP POT

The temporary repair to the 26 extraction line drip pot downstream of EST-1 allowed operation in the same manner as the original. The repair materials were compatible with the original installation. Work was performed under an approved maintenance procedure which precluded the introduction of sealant material into the system. The temporary repair was non-electrical and had no impact or affect on any instruments or controls. It was located in the Turbine Building and would not have been affected by an external event. No unreviewed safety question was involved.

SE-97-110-MD

EMERGENCY DIESEL GENERATOR (EDG) JACKET COOLING WATER EXPANSION TANK LEVEL CONTROL VALVES

This modification removed the internals of level control valves, LCV-5004, LCV-5005 and LCV-5006 due to their unreliability, leaving the bodies in place. These valves are located in each of the EDG Jacket Water expansion tanks. Level control of the expansion tanks are now performed manually utilizing MW-14, MW-14-1 and MW-14-2. This change did not alter the safety-related function of the EDG Jacket Water system and no new failure modes were introduced. There was no change in material, and no change in electrical systems or loads. The LCV's are not part of the ISI/IST program. No unreviewed safety question was involved.

SE-97-112-MD, Rev. 1

IP-2 MOV PRESSURE EQUALIZATION

This modification, in response to NRC Generic Letter 95-07, drilled a hole in the high pressure disk (non-sealing disk) of MOVs 746,747, 889A, and 889B, and installed a bonnet bypass on MOVs 1802A and 1802B. The bonnet bypass was from the valve bonnet to the high pressure side of the valve. As noted in the ISI/IST program it has a test valve that was sealed open during plant operation and was only closed during Recirculation Pump testing. The valve must be reopened after the test. This modification did not impact the operability of any system during normal, abnormal, or accident conditions. It did enhance the performance of the MOVs during accident conditions by pressure equalization paths precluding pressure locking of the valves. New potential failure modes were minimized by revisions to plant maintenance and test procedures, Check-Off Lists, and with a sign attached to MOVs 1802A and 1802B indicating they are to be in the open position when the unit was in operation. This modification did not change the structural integrity or seismic qualification of the MOVs. No unreviewed safety question was involved.

SE-97-113-TM

PRIMARY AUXILIARY BUILDING (PAB) CHARCOAL FILTER DELUGE TEST WITH STATION AIR

A change was installed to test the PAB Charcoal Filter Deluge System with Station Air while the deluge system was out of service and compensatory measures to suppress fires were in service. An auto ball drip valve FP-1226 was removed and a manifold installed with a pressure gauge, tee with a pressure bleed-off valve, regulator and an isolation valve. A hose was attached to the open end of the manifold and run to a station air service connection. All connections were compatible and none of the installed equipment or the deluge system was safety related. However, the hose was restrained at intervals to minimize the effects of a station air hose rupture. The operability of the deluge system was not impacted since it was out of service and no new failure modes were introduced. No electrical systems or loads were altered. No unreviewed safety question was involved.

SE-97-114-TM

CLEAR THE "FAN ROOM FAN AUTO TRIP" ALARM

A spider assembly was installed on relay AR2, located in the Primary Auxiliary Building (PAB) supply fan control panel. The jumper did not impede the proper closure on the PAB supply Fan control panel door. It cleared the Fan Room Fan Auto Trip category alarm in the Central Control Room (CCR) and allowed other alarm inputs, which were being masked, to inform CCR Operators of possible problems. If the spider assembly had become disconnected, the category alarm in the CCR would have annunciated, and alerted the Operators of the need for investigation. There was no impact on any electrical systems or electrical loads. The spider was removed upon resolution of the problem with the PAB supply fan. No unreviewed safety question was involved.

SE-97-115-DE

REPLACEMENT OF GASKETS IN CLASS A APPLICATIONS

Various gaskets were replaced in Class A applications on various elevations of Primary Auxiliary Building, Containment building, and Auxiliary Feedwater building. They were installed on blind flanges downstream of closed drain or vent valves. The original gaskets may or may not have contained asbestos containing material. The new Flexi-Load gaskets do not contain asbestos. Materials of the replacement gaskets were compatible with the original. New gaskets were mounted in the same configuration and function in the same manner as the originals. The gasket replacement did not create a new or different kind of failure mechanism than the originals. No unreviewed safety question was involved.

SE-97-116-MM

DAMPER REPLACEMENT

This modification disconnected and removed louvers of the balancing dampers from the plenum for the Primary Auxiliary Building and Containment Purge Exhaust Fans, and retired in place the damper actuators and static pressure regulator. It also disconnected and capped the instrument air tubing to the actuator accumulators. The change was wholly internal to the system. Removing the dampers improved ventilation capacity and no new failure modes were introduced. The margin of safety remained the same because the ventilated air continued to be properly contained and monitored for radiation prior to release. No unreviewed safety question was involved.

SE-97-118-DE

REACTOR CAVITY PIT & CONTAINMENT SUMP TV CAMERA REPLACEMENT

Reactor Cavity Pit & Containment Sump TV cameras were replaced during the refueling outage due to their inoperability. The plant's mode of operation was not impacted. The cameras and monitors, which have no safety function, were installed in the existing closed circuit television system. Materials of the new equipment were compatible with the original and there was no change in previous conditions. A fire protection review

and human engineering review was performed and found to be acceptable. No unreviewed safety question was involved.

SE-97-119-SP, Rev. 1

SETPOINT CHANGE

The Emergency Diesel Generator (EDG) provides power for safety related equipment when the normal power supply is interrupted. With the EDG shutdown, the settings on the EDG-SDR shut time delay relay were changed from the previous setting to 47 seconds to increase the margin against EDG "dieseling" on shutdown. This change was a timer setting change only. The increase in margin did not affect the performance of the diesel when it was operating nor did it have any credible affect on the availability of the diesel generators. There were no increases in consequences of equipment malfunctions previously evaluated. No unreviewed safety question was involved.

SE-97-120-DE

REPLACEMENT OF BREAKER AMPTECTOR ACTUATOR

The new Westinghouse Amprector Direct Trip Actuator (DTA) for the Emergency Diesel Generator DB breaker was a direct replacement. The materials of the new DTA were compatible and its electrical characteristics equivalent to the original. The function of the DTA's is to trip the Westinghouse DB breaker in the event of a fault or overload. Therefore, there was no impact on any electrical system or electrical load. The new DTA's were mounted on Class 1E equipment the same as the original. No unreviewed safety question was involved.

SE-97-121-DE

VALVE REPLACEMENT

A 1" gate valve was replaced in the Unit 1 Fresh Water Recirculation System, which processes city water. The change was non-electrical. It took place in the Superheater Building and did not affect containment. Materials of the new valve were the same as the original. No unreviewed safety question was involved.

SE-97-122-DE

REPLACEMENT OF BLOCK VALVES

Pressurizer block valves were replaced. The change was an equivalent replacement and the materials were compatible with the originals. There was no change in the operability of any system. The new valves were seismically maintained. No unreviewed safety question was involved.

SE-97-123-TM

INSTALLATION OF PRESSURE GAUGE

A 0-100 psi test gauge was installed at valve JW-568 to provide a means of observing the pressure at 22 Emergency Diesel Generator (EDG) Jacket Water Pressure Switch during 22 EDG preventive maintenance. During the test the gauge did not alter the function of

the pressure switch. No new failure mode was introduced by this change and no electrical systems or loads were altered. Upon completion, the test gauge was removed, the cap was reinstalled and tested for leakage at normal operating pressure. No unreviewed safety question was involved.

SE-97-124-TM

PROTEUS POINT REMOVED FROM SCAN

Proteus computer Point F-0443, which scanned steam generator 23 feedwater flow, was removed because it was indicating lower than the other three loops, causing a constant alarm. The input to the Proteus heat balance program was rejected. The CCR operators had to work around this erroneous input and perform a PC based heat balance which required manual data input. The computer point removed was used for indication only and had no control or safety related functions. This involved computer software and did not affect any safety related equipment or controls. Operators were able to perform a quicker and more accurate heat balance. No unreviewed safety question was involved.

SE-97-125-TM

BYPASS ZERO SPEED SWITCH

The auxiliary screen zero speed switch was bypassed by a jumper in the screen's logic circuit. The zero speed screen switch acts to trip the auxiliary screen motor if the screen becomes jammed or stops. This change took place in the Unit 1 screenwell house. River water at ambient temperatures and pressures was the only fluid processed by the auxiliary screens. The change introduced the possibility that the motor would not trip in the event that the screen stopped rotating, but this was mitigated by use of the supplemental log sheet and operator action. The change was unrelated to the plant's mode of operation and did not involve Class 1E equipment. No unreviewed safety question was involved.

SE-97-126-SP

SWITCHES SETPOINT CHANGE

Emergency Diesel Generator (EDG) Jacket Water Pressure Switches setpoints were increased to reduce the possibility of switch hang-ups due to slow pressure decay and improve the EDG availability. This modification was done on Class 1E equipment and improved its reliability. It did not change any system design conditions and no new failure modes were introduced. The modification was approved by the diesel manufacturer. No unreviewed safety question was involved.

SE-97-128-DE

ZERO SPEED SENSOR REPLACEMENT

The 11 & 12 Auxiliary Screen zero speed sensors were replaced. The replacements provided the same function and operated in the same manner as the original sensors. There was no impact to the River Water System and no new failure modes were introduced. The change was non-electrical and was not required to be functional after a

seismic event. EQ was not applicable to this change. No unreviewed safety question was involved.

SE-97-129-DE

REPLACEMENT OF CHARGING PUMP CRANK CASE GASKETS

The Chemical and Volume Control System Charging Pump crank case gaskets were replaced. All materials used in these seals were compatible with oil and were suitable for charging pump application. They functioned under the same pressure, temperature, flow and other conditions as the originals. Operability of the system remained the same and no new failure modes were introduced. The replacement gaskets were non-electrical, did not alter any high energy line considerations and did not impact the ISI/IST Program. No unreviewed safety question was involved.

SE-97-130-DE

CHECK VALVE REPLACEMENT

Swing check valve FP-92, located in Fire Pump Room 12 in the Unit 1 Turbine Building, was replaced. The replacement valve met UL and FM requirements and was operated in the same manner as the original valve. No unreviewed safety question was involved.

SE-97-131-TM

UNMASK HIGH RAD ALARM

A jumper was installed to unmask valid alarm inputs from Area Radiation Monitors (ARM's). Three ARM's monitored the area radiation levels in the High Radiation Sample System area in the Primary Auxiliary Building (PAB). With one common category alarm on the Sentry Panel in the PAB, which alarms on high radiation levels or monitor failures, when one alarm was out of service the annunciated alarm masked the other two ARM's. This jumper did not impact the operability of any system. It only removed the already out-of-service monitor input from the common category alarm, thereby unmasking the other in-service ARM's inputs to the alarm. There was no impact on design parameters, electrical systems or loads. No unreviewed safety question was involved.

SE-97-132-MD

RETIREMENT OF FUEL STORAGE BUILDING SUPPLY FANS

The power supply and control circuits for the Unit 2 Fuel Storage Building supply fans (air tempering units) as well as the dampers associated with the supply fans and the exhaust fan were disconnected and retired in place by this modification. The dampers continued to be manually operated, and the flow through the dampers together with in-leakage from other openings maintained slightly negative pressure and adequate ventilation in the building with only the exhaust fan running. This change did not impact the plant's mode of operation and no new failure modes were introduced. No new equipment was installed. Electrical loads of the supply fans were removed from MCC27 and the wires and insulating tapes for splices were Class A and suitable for this application. No unreviewed safety question was involved.

SE-97-133-DE

REPLACEMENT OF H₂/O₂ ANALYZER PARTS

H₂/O₂ Analyzer parts were replaced with equivalent parts. The parts did not adversely affect the functioning of any Class 1E equipment because they did not change voltage, frequency, or power requirements, and were certified to the original IEEE-323 and 344 qualification report. There was no impact by the mode of plant operation because there was no change to the way the host equipment operated under the specified conditions. The replacement parts maintained the original environmental and seismic qualification. No unreviewed safety question was involved.

SE-97-134-DE

REPLACEMENT PARTS FOR GATE VALVES

Parts for Crane 3" 900# gate valves were replaced. The replacement did not impact the operability of any system or equipment, and no new failure modes were introduced. Materials were compatible with the original installation. Seismic capability was maintained since the parts whose material was replaced was captured within the valve body. Changing the material of the internal valve parts had no effect on human interactions or personnel error potential. No unreviewed safety question was involved.

SE-97-135-DE

REPLACE MAIN FEED PUMP LUBE OIL COOLERS

The change consisted of deleting admiralty brass tubes which are rolled into admiralty tube sheets and replacing them with titanium tubes which were welded into a titanium tubesheet. This material was considered an upgrade since it has superior corrosion resistance properties. Also the new tubesheet material eliminated galvanic interaction between materials. The tubes were welded into the tubesheet eliminating the potential for roll leaks between the tube and the tubesheet, and the channel heads were epoxy coated which provided protection from river water. No new failure modes were introduced and failure modes such as tube degradation and leakage were reduced by this replacement. This replacement material did not impact any systems or processes. No unreviewed safety question was involved.

SE-97-136-MM, Rev. 2

**NRC GENERIC LETTER 96-06 THERMAL OVERPRESSURE COMPLIANCE
MODIFICATION**

Con Edison's response to NRC Generic Letter 96-06, "Assurance of Equipment Operability and Containment Integrity During Design-Basis Accident Conditions," required the review of isolated lines penetrating containment for their susceptibility to thermally-induced over-pressurization under design basis accident conditions. Those lines that did not meet Final Safety Analysis Report design criteria, but met the operability criteria were modified by the addition of thermal relief valves (Pressurizer Liquid Space Sampling line #26, Accumulator Sample line #69, RCDT Pump Discharge line #40 and Containment Sump Pump Discharge line #338) or thermal insulation (RHR

Letdown line # 10). Line #474 was not used and was cut and capped. The relief valves were installed inside the containment and did not affect the safety related function of the systems involved. Installation of insulation on line #10 increased the load on the pipe supports but seismic qualification was still maintained. A new failure mode due to these modifications could result in the loss of the ability to sample from these lines. This postulated failure was considered and determined to be acceptable. There was no impact on electrical equipment or load and no instrumentation or control work was affected. All valves were included in the ISI/IST program to be tested every 10 years. No unreviewed safety question was involved.

SE-97-137-TM

PRESSURIZER SAFETY VALVES

A wire mesh screen cover was installed on The pressurizer safety valve flange. This temporary modification provided protection from foreign material entering the Reactor Coolant System while the safety valves were removed. The cover provided a discharge area greater than the respective pressurizer safety flanges thereby not restricting the analyzed vent path. The plant was limited to Cold Shutdown while this temporary modification was in place. There was no impact to the seismic capability of the system. No unreviewed safety question was involved.

SE-97-139-MM

MAIN GENERATOR FLUX PROBE

A flux probe was permanently installed in one of the generator stator slots. This probe provided data for analysis of generator operation and manufacturer recommendations. There was no impact to the operability of any equipment or system. No unreviewed safety question was involved.

SE-97-140-MD

CLOSED LOOP COOLING PUMP REPLACEMENT

The IA-21 and IA-22 Closed Loop Cooling Pump/Motor assemblies were replaced. The pumps provide cooling water for the Instrument Air System. The replacement assemblies required new thermal overloads, however, they are outside the Class 1E boundary. The increased motor load was approved as acceptable. The existing wiring and feeds were adequate and maintained. The replacement assemblies were installed to maintain the seismic capability of the system. No unreviewed safety question was involved.

SE-97-144-DE

SAFETY INJECTION PUMP SEAL

A replacement gasket was installed on the Safety Injection Pump's Seal. The replacement material is compatible with the pump seal materials. The seismic capability was retained. This modification did not affect the operability of the pump. No unreviewed safety question was involved.

SE-97-145-TR

EQUIPMENT HATCH CONCRETE SHIELD

Temporary repairs were made to the lifting eyes of the concrete hatch covers to relieve an over stress condition. There was no lifting over safety related equipment. These covers did not interface with any equipment or system. No unreviewed safety question was involved.

SE-97-146-TM

SERVICE WATER PUMP PIPING TEST

Instrumentation was installed on the supply and return lines for Fan Cooler Unit 24 to obtain dynamic loading data during the PT-R14 test. The Reactor Coolant System Temperature was required to be less than 200F. There was no adverse safety impact to the Service Water System or the Fan Cooler Unit from this temporary modification. No unreviewed safety question was involved.

SE-97-147-PR

HOUSE SERVICE BOILER FUEL SUPPLY

The fuel oil line from the Fuel Oil Tank Farm to the House Service Boilers was reprimed. This Temporary Operating Instruction (TOI) detailed the activities required to prime the line. All safety systems for Unit No.2 were separated by a sizable distance from this activity. There was no affect on any safety equipment or systems because of this work. No unreviewed safety question was involved.

SE-97-149-TM

EMERGENCY DIESEL GENERATOR GOVERNOR TEST

Temporary tubing replaced the existing one from the servomotor to the governor on the 22 Emergency Diesel Generator (EDG). This allowed data collection to resolve the overspeed event on April 24, 1997. The system was returned to its original configuration after the test data was collected. The EDG was inoperable and the Limiting Condition for Operation (LCO) in effect during the test. No unreviewed safety question was involved.

SE-97-150-TM

OIL FLUSH SKID

A temporary electrical feed was installed from MCC 25 Bus to power the Oil Flush Skid. This temporary modification was limited to Cold Shutdown during the refueling outage. The electrical bus loading is acceptable during this temporary modification. MCC 25 has no safety function during the oil flush operation of the Main Turbine Generator. No unreviewed safety question was involved.

SE-97-151-DE

MAIN BOILER FEED PUMP CHECK VALVES

The internal components of the Main Boiler Feed Pump Discharge Check Valves, BFD-1 and BFD-1-1 were replaced. The replacement materials were considered an upgrade. This

change did not affect the design conditions of the check valves or the operability of the Feedwater System. No unreviewed safety question was involved.

SE-97-152-TM

EMERGENCY DIESEL GENERATOR (EDG) JACKET WATER PRESSURE SWITCH

The isolation valve for the pressure switch was removed. Capability to isolate the pressure switch was retained through another valve. The normal and safety related functions of the pressure switch were retained. The modification did not affect the seismic capability of the equipment. The removal of the valve did not affect the operation of the EDG. No unreviewed safety question was involved.

SE-97-153-DE

PRESSURE SWITCH REPLACEMENT ON EMERGENCY DIESEL-GENERATOR

A jacket water pressure switch on an emergency diesel-generator was replaced. The switch function was not affected. There was no impact on operability. Materials are compatible. The new switch is seismically capable. The replacement did not involve an unreviewed safety question.

SE-97-154-TM

EMERGENCY DIESEL GENERATOR (EDG) JACKET WATER PRESSURE SWITCH

Varistors were installed across the contacts of Jacket Water Pressure switches on all the EDG's to protect against voltage surges. The normal and safety related functions of the pressure switches were retained. There was no change to the seismic capability of the switches. The Varistor did not affect the operation of the EDG's. No unreviewed safety question was involved.

SE-97-155-DE

EMERGENCY DIESEL GENERATOR (EDG) PRESSURE SWITCH REPLACEMENT

EDG Jacket Water Pressure Switches were replaced. The normal and safety related functions of the pressure switches were retained. The replacement switches had previously been seismically capable. The replacement switches did not affect the operation of the EDG. No unreviewed safety question was involved.

SE-97-158-PR, Rev. 1

REACTOR COOLANT PUMPS (RCP), BACKSEAT OPERATION

This Temporary Operating Instruction (TOI) provided steps while the RCP was on backseat (with Fuel in the Reactor or during Fuel Transfer) to direct RCP leakage to the Containment Sump. It also included contingency actions for excessive backseat leakage flow. The leakage that could happen if the RCP floated off it's backseat is within the capability of one Coolant Charging Pump. Therefore, the refueling cavity level can be maintained and no Fuel would be uncovered if stuck in the fully raised position. No unreviewed safety question was involved.

SE-97-159-DE

WASTE DISPOSAL SYSTEM VALVE REPLACEMENT

Strainer Valve ST-45 was replaced. The equivalent new valve operates in the same manner as the original and the material was compatible with the existing installation. No systems were affected by the replacement valve. The seismic supports are not affected by this replacement. No unreviewed safety question was involved.

SE-97-160-DE

RELIEF VALVE REPLACEMENT

Relief Valve WPC-116 was replaced. The new valve is equivalent and operates in the same manner as the original and the material was compatible with the existing installation. No systems were affected by the replacement valve. The seismic supports are not affected by this replacement. No unreviewed safety question was involved.

SE-97-162-DE

SERVICE WATER VALVE REPLACEMENT

Gate Valve SWT-4 was replaced. The new valve is equivalent and operates in the same manner as the original and the material was the same as the existing installation. No systems were affected by the replacement valve. The seismic supports are not affected by this replacement. No unreviewed safety question was involved.

SE-97-163-DE

MAIN BOILER FEED PUMP (MBFP) RECIRCULATING CONTROL VALVES

The actuator springs for Recirculating Flow Control Valves FCV-1115 and FCV-1116 were replaced. The replacement springs were the same material as the original. The change did not affect the operability of the feedwater system. No unreviewed safety question was involved.

SE-97-165-MM

MANUAL ROD CONTROL SYSTEM INTERLOCK

A mechanical interlock was installed on the Rod Control Switch handle. One of the interlock positions inhibits operation of the control switch handle. This modification did not affect any safety related function of the Rod Control System. No unreviewed safety question was involved.

SE-97-166-TM

CITY WATER FOR ASBESTOS ABATEMENT

A city water supply to the Asbestos Decon Unit was installed. No systems were affected by the temporary hose. No unreviewed safety question was involved.

SE-97-167-TM

WELD CHANNEL AND CONTAINMENT PENETRATION PRESSURIZATION SYSTEM (WCCPPS)

A spool piece was installed in the WCCPPS to maintain pressurization while the Flow meters were removed for calibration. The required plant mode for this temporary modification was Cold Shutdown. The safety related function of the system was not required in Cold Shutdown. No unreviewed safety question was involved.

SE-97-168-TM

EMERGENCY DIESEL GENERATOR (EDG) TEST CONNECTIONS

Two fittings were installed in the Jacket Water Pressure Switches sensing lines to facilitate data collection for 22 EDG problem analysis. Temporary instruments were removed after the test was completed. This modification did not affect the safety related functions of the EDG. No unreviewed safety question was involved.

SE-97-170-TM

FUEL HANDLING CONVEYOR CAR

A electrical jumper was installed to override the interlock function that required the handwheel for the traverse gearmotor to be in the stored position before electrical operation was permitted. The handwheel was missing. This interlock prevents a spinning handwheel from coming in contact with personnel. This modification did not affect the safety related function of the system. No personnel safety was affected because the handwheel was missing. No unreviewed safety question was involved.

SE-97-171-DE

FAN COOLING UNIT (FCU) BOOT RESTRAINT

This change allowed a hose type clamp to be used to restrain the FCU fan boot. The hose type clamp was determined to be equivalent to the band type which was an approved restraint. The hose type clamp did not impact the operability of the system. No safety related functions were affected. No unreviewed safety question was involved.

SE-97-172-DE

MOISTURE PRESEPARATOR SIGHT GLASS ISOLATION VALVES

The Moisture Preseparator Sight Glass Isolation Valves were replaced. The new valve is equivalent and operates in the same manner as the originals and the material was compatible with the existing installation. No systems were affected by the replacement valves. No unreviewed safety question was involved.

SE-97-173-TM

SERVICE WATER SYSTEM

A blind flange was installed at FCV-1112. This flange isolates the Secondary Plant Services, which were out of service, from the 1,2,3 Header. The required plant mode for

this temporary modification was Cold Shutdown. No safety related functions were affected by this modification. No unreviewed safety question was involved.

SE-97-174-TM

MAIN GENERATOR DRYER

A dryer was installed to maintain the Main Generator winding in a dry condition during the outage. No systems were affected by the modification. No unreviewed safety question was involved.

SE-97-175-DE

FAN COOLING UNIT (FCU) ANNUBAR

The FCU flow element annubar was replaced. The replacement was a functional equivalent. The materials were the same as the original. No safety related functions were affected by this modification. No unreviewed safety question was involved.

SE-97-176-TM

POLAR CRANE MANIPULATOR BRIDGE INTERLOCK

This temporary modification removed the electrical power leads from the bridge and trolley motors for the polar crane after it had been positioned to lift the reactor head on its stand. The interlock that prevents movement of the manipulator bridge when the polar crane is not in the designated position was bypassed. The manipulator bridge was then tested over its entire range of motion to insure there were no interferences with the polar crane before any fuel movement was allowed. No failures due to polar crane positioning are possible with this temporary modification. No other safety related equipment was affected. No unreviewed safety question was involved.

SE-97-177-EV

RESIDUAL HEAT REMOVAL (RHR) HEAT EXCHANGERS SHIELDING

This evaluation analyzed the mechanical loading of temporary lead shielding hung from the RHR Heat Exchangers to reduce radiation exposure. The maximum weight allowed was less than 50% of the equipment's structural capability. The lead shielding is seismically restrained with straps and the seismic loading acceptable. No unreviewed safety question was involved.

SE-97-178-MM

HOUSE SERVICE BOILER (HSB) PRESSURE GAUGES

Isolation valves and test connections were installed in the House Service Boiler Pressure Gauge lines. The materials were compatible with the existing installation. The HSB do not perform any safety related function. No unreviewed safety question was involved.

SE-97-180-DE

FUEL STORAGE BUILDING UPENDER WINCH

The oil seal for the upender winch was replaced. The material was compatible with the existing installation. The replacement did not affect the operability of any system or equipment. No unreviewed safety question was involved.

SE-97-181-MM

CORRECTION OF POLAR CRANE AUXILIARY HOIST OVERSTRESS

Notification was received from the manufacturer of the Unit 2 Containment Polar Crane that an overstress condition had been revealed in the support bracket of the auxiliary hoist. The main hoist was unaffected. The condition was corrected by stiffening the attachment of the auxiliary hoist support brackets to the main hoist trolley. The auxiliary hoist was thereby restored to its full rated capacity. No unreviewed safety question was involved.

SE-97-182-TR

POST ACCIDENT CONTAINMENT (PAC) VENTILATION BUNKER LID

This temporary repair strengthened the lifting attachment of the PAC vent bunker lid. The lifting attachments were seismically designed. No system design parameters were affected. No unreviewed safety question was involved.

SE-97-183-TR

MAIN TURBINE LUBE OIL SYSTEM

A patch of resin-type material temporarily repaired a leak in the Turbine Lube oil drain line. This repair did not affect any safety related system or equipment. No unreviewed safety question was involved.

SE-97-184-TM

ELECTRICAL DISTRIBUTION PANEL CPF

A temporary power feed was installed to Distribution Panel CPF while the normal feed was relocated. The plant was in Cold Shutdown. The Primary Auxiliary Building/Boric Acid Building/Containment purge and exhaust filters and the Fan House fire detection did not function during the short interruption of power. Necessary fire watches were instituted that mitigated the fire detection system inoperability. The Primary Auxiliary Building Exhaust Fans are not required in Cold Shutdown. No unreviewed safety question was involved.

SE-97-185-TM

FRESH WATER CLOSED COOLING (FWCC) SYSTEM

Blind flanges were installed to allow maintenance on the 12 FWCC Pump. The remaining FWCC System pump remained in service. The flange material was compatible with existing installation. No safety related systems or equipment was affected. No unreviewed safety question was involved.

SE-97-186-TM

HYDROGEN VENT LINE

A temporary Nitrogen purge for the Hydrogen Vent Line was installed to facilitate cutting and welding on the line. Operability was not required because the systems were secured for the unit outage. The hose materials were compatible with the existing system. No unreviewed safety question was involved.

SE-97-187-EV

STEAM GENERATOR PRIMARY MANWAY COVERS

This evaluation demonstrated that the use of four fastener sets out of 16 sets for the Steam Generator Primary Manway Covers was sufficient to withstand the expected pressures during Refueling or Mid-Loop operation. No unreviewed safety question was involved.

SE-97-188-DE

EMERGENCY DIESEL GENERATOR (EDG)

The hoses for the jacket water pressure switches on the EDG's were replaced with equivalent hoses. The new hose material is compatible with the existing system. There was no affect on any safety related system or equipment. No unreviewed safety question was involved.

SE-97-189-PR

CONTAINMENT ISOLATION VALVES

This Temporary Operating Instruction (TOI) provided a temporary Primary Water supply to flush Motor Operated Valves 885A and 885B. The valves failed the B & C Testing. Fuel was out of the Reactor and the Residual Heat Removal (RHR) System was drained and tagged out. The safety related function of the RHR system is not required in this mode. No unreviewed safety question was involved.

SE-97-190-PR

BORATION PATHS FLUSHING

Chemical and Volume Control System injection paths were flushed with Primary Water. Performance of the TOI during the 1997 Refueling outage required all Fuel to be out of the Reactor. No unreviewed safety question was involved.

SE-97-191-TM

REACTOR COOLANT SYSTEM (RCS) LEVEL INDICATION

An alternate RCS level indicator was installed to replace Drain Down Level Indicator LI-3100 while the Control Room Panel was modified. A digital voltmeter with an appropriate conversion table provided the Operator the RCS level indication. No fuel was in the Reactor. The level indication had no safety related function. No unreviewed safety question was involved.

SE-97-192-TM

HYDROGEN SYSTEM

A temporary hose was installed to supply Nitrogen to Hydrogen Manifold in the Primary Auxiliary Building while in Cold Shutdown. This facilitated the purging of the Hydrogen System for maintenance work. The Hydrogen Recombiners are not required in Cold Shutdown. No unreviewed safety question was involved.

SE-97-194-DE

STEAM GENERATOR INSULATION REPLACEMENT

The insulation for Steam Generators 22, 23 and 24 was replaced. The replacement insulation was tested and qualified for accident conditions. The new material was compatible with the Steam Generator shell and other existing insulation material. There was no adverse affect on the seismic capability of the system or the Fire Protection Plan or Appendix R compliance. No unreviewed safety question was involved.

SE-97-195-DE

RESIDUAL HEAT REMOVAL (RHR) SYSTEM

The packing was replaced on RHR Valves 746 and 747. The new packing met the design requirements of the existing packing. It was installed in accordance with instructions. This change did not affect the operability of any safety related system or equipment. No unreviewed safety question was involved.

SE-97-197-MM

DEGRADED VOLTAGE MONITOR LIGHTS

Indicating lights were added to supervise the degraded voltage under voltage (UV) test switch. This modification ensures that the UV test switch is engaged after the degraded UV test has been completed. The new switch and lights were installed according to Class 1E and seismic requirements. No safety related function was altered by this change. No unreviewed safety question was involved.

SE-97-198-PR

CONTAINMENT MOTOR OPERATED VALVE (MOV)

This procedure specifies the steps to be followed to dynamically test MOV-744 in accordance with Generic Letter 89-10. The procedure requires the Upper Internals to be installed in the Reactor vessel, no Fuel in the Reactor and the Refueling Cavity level available for the discharge flow of the test. One Residual Heat Removal (RHR) Pump and the Refueling Water Storage Tank provide the required flows to the test. The RHR system does not provide any safety function in this test condition. No unreviewed safety question was involved.

SE-97-199-EV

FEEDWATER SYSTEM TIMING

This analysis evaluated increasing the Feedwater Control Valve mechanical stroke time, the Feedwater Control Bypass Valve mechanical stroke time and the Boiler Feed Pump Trip time delay based on Cycle 14 licensing basis. Individual evaluations were performed according to the pertinent licensing basis acceptance criteria. The changes did not affect the licensing basis criteria. No unreviewed safety question was involved.

SE-97-200-TR

VALVE 894C REPAIR

A temporary repair was performed on the valve trim of Accumulator Discharge Isolation Valve 894C to restore its shutoff capability until a replacement valve can be installed. A Post-Maintenance Test verified the valve meets all operability requirements. The safety function was not affected by this temporary repair. No unreviewed safety question was involved.

SE-97-201-TM

VALVE 848B DISC REMOVAL

The disc was removed from Valve 848B. The isolation function for Safety Injection Pump 23 suction was inoperable while the disc was removed. The only allowed mode of operation with the disc removed was Cold Shutdown. The Safety Injection System is not required to be operable in Cold Shutdown. No unreviewed safety question was involved.

SE-97-202-EV

ROD CONTROL CLUSTER (RCC) CHANGE FIXTURE

The storage of the Hi-Par Dummy Fuel Assembly in the RCC Change Fixture during power operations was evaluated. This permits Fuel Transfer System testing to begin without having to move the Dummy Fuel Assembly over the Fuel Transfer Canal Weir Gate. The Dummy Fuel Assembly is the same weight and configuration as the actual Fuel Assemblies. The Dummy Fuel Assembly will be seismically restrained. The safety related function of the RCC Change Fixture or the Dummy Fuel Assembly are not affected by this change. No unreviewed safety question was involved.

SE-97-203-EV

MOTOR OPERATED VALVE (MOV) PROGRAM

Removal of all Accumulator Discharge Isolation Valves from the MOV Program was evaluated.

The active safety function of these valves was disabled after NRC Branch Technical Position EICSB-18 review. In normal plant operation the valves are open and their control circuits de-energized. Other plant conditions require the valves to be closed and their control circuits de-energized. The valves are not required to change position upon accident initiation, during or any time following an accident. No unreviewed safety question was involved.

SE-97-204-DE

STEAM GENERATORS AND PRESSURIZER GASKETS

The asbestos gaskets on the Steam Generators and the Pressurizer were replaced. The new gaskets have the same fit, form and function as the existing ones. The materials are suitable for the operating requirements. The new gaskets did not change the safety related function of any system or equipment. No unreviewed safety question was involved.

SE-97-206-TM

FAN COOLING UNITS (FCUs) SERVICE WATER (SW)

Blind flanges were installed at Temperature Indicator 1239. This temporary modification allowed Service Water (SW) to be supplied to FCUs with relief valves to cool the Containment. The blind flanges were only used in Cold Shutdown. At Cold Shutdown there was no requirement for the safety related functions of the SW to the FCUs. No unreviewed safety question was involved.

SE-97-208-MD

CONTROL ROD DRIVE MECHANISM TIMING CHANGES

Changes were incorporated in the current order timing of control rod drive mechanisms to implement a revised Westinghouse standard timing and to respond to NRC Generic Letter 93-04. All failure mode rod movements continue to be within the bounds of the current licensing basis, there is no impact on safety related equipment, and there was no increase in the probability of a malfunction of equipment important to safety. There was no change to the Technical Specifications. No unreviewed safety question was involved.

SE-97-209-DE

ALTERATIONS TO BONNET STUDS AND STUD HOLES

Bonnet studs and stud holes were altered in Main Steam Isolation Valves and MS-2s; this alteration decreased the body area retaining the cover, but the manufacturer verified there would be no adverse effect on the valves. Operation of the valves remains the same, functionality during a seismic event was not changed, and the likelihood of failure of the associated high energy lines was not increased. No unreviewed safety question was involved.

SE-97-210-MD

COMPRESSORS UPGRADE

Centac compressors 11 and 12 were upgraded. No system's design pressures, temperatures, flow rates, or other parameters were affected by this change, and the change did not introduce additional failure modes. The plant's mode of operation was not affected except for the addition of a compressors category trouble alarm to the existing "Station Air Header Low Pressure" alarm. The Centac compressors are fed from Unit 1, so no Unit 2 bus, vital or non-vital, was affected. Newly added cables were routed in dedicated conduits, not added to existing trays. No unreviewed safety question was involved.

SE-97-211-DE

INSTALL THREADED BUSHINGS IN BOLT HOLES

Threaded bushings were installed in cap screw bolt holes for the reactor vessel head O-ring retaining clips. The new bushings have the same fit, form, and function as existed, and restore the O-ring clip configuration. The only function of the clips is to hold the O-rings in place and prevent them from sagging during installation of the reactor vessel head. Once the head is tensioned, the clips do not serve any function. All materials were compatible with the installation, and there was no change to any existing analysis or design parameter. There was no effect on the original seismic qualification of the reactor. No unreviewed safety question was involved.

SE-97-213-MM

THRUST BEARINGS SEALS ENHANCEMENT

The seals on the main turbine thrust bearing cage and oil deflector were modified to prevent oil leakage when the turbine is on turning gear. New babbitted seal rings were installed, and an extension with seal strips was welded to the outer oil deflector to provide a second level of sealing capability. The new seal rings are soft and will not cause any damage to the shaft surface, and the oil deflector strips are brass rings. The change was to a non-Class equipment and system. No unreviewed safety question was involved.

SE-97-215-DE

NITROGEN SUPPLY REGULATOR REPLACEMENT

A pressure regulator in the nitrogen supply to the IVSW tank was replaced with a regulator that provides the same functions and operates in the same manner as the old regulator. The materials of the new regulator are consistent with the piping materials specification, and the regulator meets or exceeds the design requirements of the system. Seismic capability was maintained, and the weight of the new regulator is within the bounds of the existing stress analysis. No unreviewed safety question was involved.

SE-97-216-DE

REPLACE LOW PRESSURE DUMP SYSTEM VALVE

Obsolete valve MS-829 (FCV-1209 vent stop valve) was replaced with a Velan valve. The replacement valve meets all the requirements for the installation, does not change system functions or parameters, meets or exceeds all original valve design specifications, and is not located near safety related equipment. There was no impact on structures because the replacement valve and the original valve are very nearly the same weight. No unreviewed safety question was involved.

SE-97-217-MM

REPLACE ALARM MODULES FOR MAIN GENERATOR ISOLATED BUS FANS

The alarm modules for the main generator isolated bus fans were replaced with new modules by the original manufacturer. The new modules are equipped with a time delay

to prevent nuisance alarms. Emergency Diesel Generator and battery loading are not affected by this change, and no cables were installed. Reliability of Central Control Room information was enhanced and, though human engineering was not affected, the installation was reviewed and found acceptable. No unreviewed safety question was involved.

SE-97-218-DE

CHANGE PACKING ON REACTOR HEAD VENT LINE VALVES

The packing on motor operated valves HCV-3100 and HCV-3101 was changed per recommendations of the valve manufacturer. The failure modes of the packing continue to be leakage and increased running loads on the valves due to excessive tightening. The packing material is acceptable for use in the Reactor Coolant System, and opening and closing times will not be affected by the change. Stroke times were verified after the packing change. No unreviewed safety question was involved.

SE-97-219-DE

ELBOW REPLACEMENT

A steam jet air ejector elbow was replaced. The replacement did not introduce any new failure modes, and it did not have any operating impacts. The plant's mode of operation was not changed, and there was no change in any system design characteristics. The material of the replacement elbow is compatible with the existing system, and any impact on plant structures was negligible. No unreviewed safety question was involved.

SE-97-220-DE

REPLACE VALVE

Valve MS-634 was replaced with a valve that performs the same function. There was no impact on operability, and design pressures, temperatures, and flow rates were not impacted. All material is compatible with the existing installation, and the valve is located in a non-seismic system in a non-seismic area. The main steam system is a high energy system, but the new valve does not change any existing high energy studies. No unreviewed safety question was involved.

SE-97-221-TM

INSTALL STRAIN GAUGES AND LVDTs

Strain gauges and linear variable differential transformers (LVDTs) were installed on steam generator snubbers and support stands to measure the effect of plant heat-up on steam generator movement and assess the resulting loads on steam generator snubber components. These devices were installed for the purpose of obtaining information only; no safety function was involved. The materials and mounting techniques of the devices were acceptable, and electrical cables were routed as far away from cable trays and electric powered equipment as practical to avoid potential EMF interference. There was no detriment to the seismic qualification of any equipment. No unreviewed safety question was involved.

SE-97-225-TM

PROVIDE FIRE WATER TO FAN COOLER UNIT FOR TESTING

Fire water was supplied temporarily by a hose to the fan cooler unit service water header for flow and pressure testing. The 1.5-inch fire hose was properly supported and restrained over its length to prevent the possibility of damage to safety related equipment in the area. This temporary modification was installed and used only at cold shutdown conditions. The hose did not render the hose station inoperable because the hose was connected to a wye. The connections and hose were compatible with the existing service water and fire water piping, and the fire water system pressure was less than the design pressure for the service water system. No unreviewed safety question was involved.

SE-97-227-MM

INSTALL STEEL PLATES AS LIFTING EYES ON MISSILE SHIELD

Steel plates with lifting holes were installed on the equipment hatch concrete shield units to relieve an overstress condition that existed with the original lifting eyes. The plates are carbon steel, which is compatible with the installation, and their structural adequacy for the application was evaluated by calculation. No new failure modes were introduced, and the change did not impact (and was not impacted by) the plant's mode of operation. No unreviewed safety question was involved.

SE-97-228-TM

REPLACE ANUBAR WITH BLANK FLANGE

The anubar in the common service water discharge line from the fan cooler units was no longer in service and was replaced by a blank flange, thereby providing needed space in the immediate area. The blank maintains the pressure boundary of the service water system and does not affect its safety related function. Both the anubar and the blank flange use bolted connections, so installing the blank did not create an additional leakage path. No unreviewed safety question was involved.

SE-97-229-DE

REPLACE PACKING ON AIRLOCK HANDWHEELS AND RENEW VALVE SEATS

Airlock handwheel packing, and seats on valves 85 and 95, were replaced in accordance with vendor recommendations. The replacement materials provide performance superior to that of the old materials in a hostile radiological environment and they are acceptable for use in air locks. The change did not increase the possibility of excessive leakage, for the replacement parts meet the design requirements. This application will not affect containment water level in the event of an accident, because the new valve seats and packing are located well above accident water levels. Seismic capability was not affected. No unreviewed safety question was involved.

SE-97-230-TM

FIRE TRUCK WATER SUPPLY FOR FAN COOLER UNIT (FCU) TESTING

A fire truck was used to supply water to the fan cooler units for hydrostatic testing. The truck provided the high capacity necessary to overcome any leaks through the FCU service water outlets. The testing was done at cold shutdown, with the fan cooler units out of service and with personnel in attendance to terminate the test should fire fighting become necessary. The hose assembly, which formed the connection between the fire truck and a flanged nipple, contained a shutoff valve and a relief valve of sufficient capacity to protect the FCUs from pressures exceeding the test value. No unreviewed safety question was involved.

SE-97-233-TM

AIR OVERPRESSURE TO DRAIN FAN COOLER UNITS

Fan Cooler Unit (FCU) service water valves and lines required maintenance, which was performed at cold shutdown. To facilitate draining the service water lines, a station air hose was connected to the vent line on the service water outlet of the FCU and pressure was applied. The station air hose hook-up contained two isolation valves, with a pressure gauge and a check valve between the two. This equipment allowed the pressure supplied to the FCU to be maintained below 75psi (service water piping is rated >150 psi) and prevented any service water from entering the station air system. No unreviewed safety question was involved.

SE-97-234-DE

GRINNELL SAUNDERS VALVE REPLACEMENT

The valve was replaced with a like-in-kind valve that provides the same functions as the original. There was no impact on the plant's mode of operation, no impact on system design parameters, and no impact on plant structures. The body of the new valve is 314L stainless steel (the body of the original valve was 304 stainless); the material change is compatible with the existing installation. No unreviewed safety question was involved.

SE-97-236-PR

EMERGENCY OPERATING PROCEDURES CHANGES FOR 1997 REFUELING OUTAGE

The Emergency Operating Procedures were evaluated to ensure the changes contained in Revision 28 did not prevent the EOPs from performing their intended function of mitigating design-basis and beyond-design-basis accidents. Revision 28 incorporated changes required due to plant modifications installed during the 1997 refueling outage. The changes to the EOPs did not have any negative implications regarding safety and did not involve any physical work on plant systems. No unreviewed safety question was involved.

SE-97-237-EV

LOOSE PART EVALUATION - EXPLOSIVE PLUG REMNANT

A small part of an explosive plug from the cold leg side of steam generator 23 was discovered to be missing. An evaluation of operation with the loose part present in the primary system was evaluated using the guidance of NSAC-125 and 10CFR50.59(a)(2). The evaluation concluded that the plant components and safety systems would not be adversely affected during normal operation or accident conditions due to the presence of the loose part. No unreviewed safety question was involved.

SE-97-239-DE

REPLACE MOISTURE SEPARATOR REHEATERS (MSR) VENT CHAMBER DISCHARGE (VCD) LINE

This MSR VCD line replacement involved replacing a carbon steel line with a chrome-moly line to reduce erosion/corrosion. The direct substitution did not alter the existing piping configuration, and the new material was compatible with the existing components and service. Although the line is a high-energy system, no new failure mode was created by replacing the old line with one of a superior material. No unreviewed safety question was involved.

SE-97-240-EV

REPLACEMENT OF TRAVELING SCREENS

As part of the replacement of the circulating water traveling screens, it was necessary to lift the screens within the vicinity of safety related equipment. This handling of heavy loads was evaluated, and specific requirements for the crane models, shackles, slings, spreader beam, and lifting lugs were set. The evaluation concluded that the replacement of the traveling screens did not represent a reduction in the margin of safety contained in the Technical Specifications or their bases. No unreviewed safety question was involved.

SE-97-241-DE

REPLACEMENT OF ACCUMULATOR MANWAY GASKET

The old manway gasket was SBR with asbestos, and it was replaced with a new gasket whose material is 304 stainless steel with Flexicarb filler. The new gasket is acceptable in terms of possible metal interactions, radiation exposure, corrosion, etc. The change did not impact any system's parameters, for it was limited to replacing an asbestos-containing gasket with non-asbestos gasket. No unreviewed safety question was involved.

SE-97-242-EV

TEMPORARY STORAGE OF SCAFFOLDING

The temporary storage of scaffolding at the 95' level in the containment was evaluated. Storing in the containment saves the man-hours and radiation exposure required to move the scaffold out and in as it is required. The storage was for two scaffold storage racks and two closed 55-gallon drums containing the associated scaffold hardware. The evaluation considered that the materials would be lashed together and restrained with

steel cable. The materials are not a transient fire load, for they are metal, and the amount of zinc added is enveloped by the analysis of allowable zinc additions to the containment. No unreviewed safety question was involved.

SE-97-243-DE

REPLACE AIRLOCK VALVE BALLS

Chrome plated carbon steel balls in airlock valves 85A/B and 95A/B were replaced with stainless steel balls. The valve vendor recommended the use of stainless steel balls, and the new balls meet all design requirements. The installation of the new balls was a simple replacement that was an improvement and did not change the function of the valves. No unreviewed safety question was involved.

SE-97-244-DE

REPLACE COVER ABOVE SERVICE WATER VALVE PIT

The existing carbon steel cover above the service water valve pit outside the turbine building was corroded and was replaced with a cover made of stainless steel. This was a direct replacement by a material better suited to the environment. Seismic capability was maintained. No unreviewed safety question was involved.

SE-97-245-DE

REPLACE BOLTS AND NUTS WITH STUDS AND NUTS

Replacements were needed for the bolts and nuts used to secure the volume control tank manway cover. Due to material unavailability, studs and nuts were substituted. The materials associated with this change were reviewed for compatibility with the installation and were found to be compatible. No system design parameter or function was affected in any way. No unreviewed safety question was involved.

SE-97-246-DE

REPLACE CHECK VALVES IN BEARING-LUBRICATION SUPPLY LINE

Circulating water pump bearings are water lubricated, and the normal supply of this lubricating water is the service water system. Check valves in the service water supply to the pump bearings were replaced with new valves that have a lower pressure drop. The material of the new valves was compatible with the installation, and system function was not changed. The new valve weighs less than the valve used in the piping stress analysis, so additional stresses were not created. No unreviewed safety question was involved.

SE-97-248-DE

REPLACE AIRLOCK SHAFT SEALS

The airlock shaft seals, which had been packing seals, were replaced with O-ring seals. The change did not introduce any new failure modes and represents an improvement to the shaft seal design of the airlock. The O-ring material is acceptable for this application, and there is no potential interaction with other safety related equipment in the area. Radiation resistance levels are acceptable. No unreviewed safety question was involved.

SE-97-249-TM

LIMIT HOUSE SERVICE BOILER STEAM FLOW

The house service boiler controls were programmed to limit steam flow to 15,000 lb/hr or less. The purpose of the change was to limit the quantity of steam available at the site of a postulated high energy line break. The house service boiler has no safety related function and was not considered in any previously evaluated accident. This temporary modification consisted of only a programming change. No unreviewed safety question was involved.

SE-97-250-TM

ISOLATE AIR SUPPLY LINES TO WELD CHANNEL ZONES

The air supply lines to weld channel floor zones B2 and B5 were isolated by closing valves and jumpering pressure switches. The lines needed repair, which was impractical. The Technical Specifications permit the "disconnection from system" of lines impractical to repair. The UFSAR does not take credit for the weld channel system in the postulated offside dose calculation, so removal of the lines from service does not impact the operability of any system or equipment during normal, abnormal, or accident conditions. No unreviewed safety question was involved.

SE-97-251-TR

FREEZE SEAL ON SEAL TABLE THIMBLE

A connection on the seal table was leaking and had to be repaired. A freeze seal was placed on the associated thimble to prevent leakage while the connection was opened. The work was performed in accordance with the procedure "Freeze Sealing of Stainless Steel Piping" and with the unit in the cold shutdown condition. An adequate supply of nitrogen was supplied to the job site to establish and maintain the seal for the job duration plus margin, and thermocouples were used to verify the seal formation before opening the system. No unreviewed safety question was involved.

SE-97-253-MM

REPLACE HOISTING ATTACHMENTS

The existing hoisting attachments on the post accident containment ventilation system bunker lid had deformed due to the geometry of rigging necessitated by existing hoisting mechanisms; they were cut flush with the surface of the concrete lid and replaced by four swivel plate attachments using one-inch concrete expansion anchors. The only failure mode is the dropping of the lid, which is not a new failure mode, and the new lifting attachments are stronger than the ones they replaced. No unreviewed safety question was involved.

SE-97-254-DE

REPLACE CARBON STEEL PIPING/FITTINGS

The carbon steel piping and fittings downstream of various control valves were replaced with chrome-moly and/or stainless steel components to prevent erosion/corrosion. The

lines operated in the same manner as they had, and no plant mode of operation or system parameter was changed. The replacements were mounted in the same non-seismic configuration as the original, and will not affect any safety related system or equipment in a seismic event. No unreviewed safety question was involved.

SE-97-255-EV

REMOVE STAINLESS STEEL JACKETING FROM INSULATION

The removal of stainless steel jacketing from the insulation on reactor coolant system piping and the upper portion of the steam generators was evaluated. This removal was limited to those places where calcium silicate block had been replaced by removable blanket insulation. The evaluation concluded that the removal would have a negligible effect on the overall heat transfer coefficient of the insulation system and therefore negligible impact on containment heat load. The stainless steel jacketing is not relied upon to secure the blanket insulation to the piping and steam generator, so its removal was acceptable. No unreviewed safety question was involved.

SE-97-256-EV

UFSAR CHANGE FOR HYDROGEN RECOMBINER DISCHARGE AIR DUCT POSITION

This safety evaluation was undertaken to revise the UFSAR description of the discharge ducts from hydrogen recombiners. The old description states the discharge ducts are positioned upward, when in fact they are positioned horizontally. The horizontal placement was evaluated and accepted, with the evaluation showing the change does not impact the operability of any system or equipment during normal, abnormal, or accident conditions. No unreviewed safety question was involved.

SE-97-257-TM

UNMASK FAN COOLER UNIT COMMON CATEGORY ALARM

A flow switch on one Fan Cooler Unit (FCU) had failed and was masking the low flow switch inputs from the other four units. A single lead in a central control room panel was lifted and taped, which removed the input from the failed switch from the common category alarm for FCU low flow. The effect of this was to unmask the other inputs and permit the monitoring of the four remaining FCUs until replacement of the faulty switch could be completed. No unreviewed safety question was involved.

SE-97-258-EV

MOTOR OPERATED VALVE BACKSEAT EVALUATION

The UFSAR states "All valves, except those which perform a control function, are provided with backseats.....those valves normally open are backseated." An evaluation was made of 13 motor operated valves in the safety injection system recirculation flow path which would not be backseated during the recirculation phase of the design basis event. The evaluation showed that not backseating the valves would have essentially no effect on leakage, offside doses, or any important parameter. No unreviewed safety question was involved.

SE-97-259-TM

USE CONDENSATE TO PROVIDE SEAL WATER

A hose was used to supply condensate to the hotwell dump pump seal during a period when the normal condensate seal water was unavailable. The hose and fittings were compatible with the existing piping, and the plant operating mode was limited to hot shutdown while the temporary supply was in use. Seismic criteria did not apply, there was no safety related equipment in the area. No unreviewed safety question was involved.

SE-97-260-TM

TEMPORARY LEAKAGE DETECTION AIR CONNECTION

A hot air compressor was attached to the Weld Channel and Containment Penetration Pressurization System (WCCPPS), one section at a time, in order to enable heat detection equipment to locate a leak. The reactor was at a temperature of less than 200F, so the WCCPPS was not required to be operable. The line supplying the hot air contained two isolation valves, a pressure regulator, and a relief valve. A maximum pressure of 55 psig was used, and the air supply connecting line was pressurized only when personnel were in attendance. No unreviewed safety question was involved.

SE-97-261-TM

TEMPORARY LEAKAGE DETECTION WATER CONNECTION

A pump and connecting hose were used to supply water to a leaking zone of the Weld Channel and Containment Penetration Pressurization System (WCCPPS) in order to visually identify the leak location. This temporary modification was undertaken at cold shutdown, and the connection was pressurized and valved-in only when personnel were present. The materials of the connection were compatible with the existing installation, and the discharge of the pump was limited to a pressure of 100 psig or less; the WCCPPS design pressure is 150 psig. No unreviewed safety question was involved.

SE-97-262-TM

ATMOSPHERIC RELIEF VALVES FULL-STROKE TIME REQUIREMENT

The maximum time for full-stroke operation of the power operated atmospheric relief valves was changed from 20 seconds to 35 seconds. The 20-second full-stroke time was selected arbitrarily during the development of the IST program, and was changed to the 35-second time as a result of the first actual test of stroke time. The revised stroke time represents the best operating state of the valves. No credit is taken for the valves in any accident analysis, and no technical specification or its basis was affected. No unreviewed safety question was involved.

SE-97-263-TM

ISOLATE WELD CHANNEL DOME AREA

The air supply line to weld channel dome area D2 was isolated by closing valves and jumpering pressure switches. The line needed repair, which was impractical due to its

location at an elevation of approximately 250 feet. The Technical Specifications permit the "disconnection from system" of lines impractical to repair. The UFSAR does not take credit for the weld channel system in the postulated offside dose calculation, so removal of this line from service does not impact the operability of any system or equipment during normal, abnormal, or accident conditions. No unreviewed safety question was involved.

SE-97-265-TM

RESET TURBINE WITH REACTOR TRIP BREAKERS OPEN

The reactor trip/turbine trip circuit was removed from service to allow reset of the turbine while the reactor trip breakers were open. This temporary modification was accomplished when the both the turbine and the reactor were out of service, so there were no margin of safety issues. Seismic capability was maintained, no cable was rerouted or installed. No unreviewed safety question was involved.

SE-97-266-MD

MODIFY SUMP TANK AND SUMP PIT

The overflow from the Unit 1 Chemical Systems Building (CSB) sump tank via the floor drain was directed to the CSB sump pit. Additionally, one of the discharge pipes from the CSB sump tank was modified with a tee connection and extended to the sump pit to provide an alternate discharge flow path from the tank to the pit. All materials for this modification were equivalent or conformed to the existing specification for the system, and the modification did not affect design pressures or temperatures. There was no impact on the plant's mode of operation. No unreviewed safety question was involved.

SE-97-268-EV

FAN COOLER UNIT AIR FLOW SWITCH EVALUATION

The purpose of the evaluation was to ensure that no safety related function would be compromised as a result of non-functioning incident mode air flow switches. The air flow switches are redundant features with respect to air flow verification, for flow can be verified by observation of system lineup and operating condition. Verification of valve position and fan operation uses environmentally qualified components which would survive post-accident conditions, while the air flow switches are not qualified and would not survive accident conditions. The conclusion of the evaluation was that non-functioning air flow switches could be jumpered in accordance with plant procedures. No unreviewed safety question was involved.

SE-97-269-EV

CLARIFICATION OF UFSAR TABLE 6.2-9

An evaluation was performed to determine if a footnote added to UFSAR Table 6.2-9 regarding leakage from pump mechanical seals and flanges was acceptable. The total allowable leakage from the safety injection pumps, the residual heat removal pumps, and their flanges was not changed, but the allocation of leakage to these sources was. There

was no reduction in the margin of safety contained on the Technical Specifications or their bases. No unreviewed safety question was involved.

SE-97-270-DE

REPLACE SERVICE WATER SUPPLY VALVE

The service water supply stop gate valve to a degassing pump heat exchanger was replaced with an equivalent gate valve. The replacement valve met the design specifications of the existing valve and its materials were the equivalent of the existing valve. The replacement valve weighs less than the old valve, so there was no negative impact on any plant structure. The change was non-electrical. No unreviewed safety question was involved.

SE-97-271-TM

INSTALL AIR CONDITIONING UNIT

An air conditioning unit with a 10,000-Btu rating was installed in the cable spreading room to cool logic cards that were at an elevated temperature. The cards are in cabinets in the vicinity of the air conditioning unit, and the elevated temperature was felt to be due to inadequate ventilation. The air conditioning unit was equipped with a cord and plug that were plugged into a wall receptacle in the area, and non-metallic duct work directed the flow from the unit to the cabinets. A drain connection was made from the unit to the local floor drain using Tygon tubing. The unit does not perform a safety function and is not safety related. No unreviewed safety question was involved.

SE-97-272-TM

INSTALL CONTAINMENT SUMP MONITOR SELECTOR SWITCH

The containment sump monitors allow Central Control Room personnel to view the containment and reactor cavity sumps. One of the two monitors was broken, so a video selector switch was installed that permitted the operators to view either sump with the one operable monitor while the broken monitor was out for repair. The monitors do not have any safety related function, and there were no margin of safety concerns associated with this temporary modification. No unreviewed safety question was involved.

SE-97-273-TM

DEFEAT INDEPENDENT ELECTRICAL OVERSPEED PROTECTION SYSTEM

The Independent Electrical Overspeed Protection System (IEOPS) was defeated. The system is a redundant overspeed protection system for the turbine, and no credit is taken for it in the Technical Specifications or in meeting NRC's acceptance limit for protection against turbine missile generation. IEOPS is independent of those systems/components required to preserve the plant design basis for turbine missile ejection probabilities, so there was no increase in the consequences of equipment malfunctions previously evaluated. No unreviewed safety question was involved.

SE-97-274-TM

REPLACE MAIN TURBINE BEARING PRESSURE SWITCH

A main turbine bearing lift permissive pressure switch was replaced. The new switch has a narrower deadband than the old, and its pressure range encompasses with adequate margin the expected pressure. Materials of the new switch are similar or identical to those of the old switch, and the change did not impact any electrical system parameters. No electrical cables were added or rerouted. No unreviewed safety question was involved.

SE-97-276-TM

REPROGRAM BEARING TEMPERATURE MONITOR

The bearing temperature monitor was reprogrammed to remove from scan an open-circuited point that was masking other potential alarm conditions. This temporary modification was not physical in nature, in that it was simply a reprogramming of the bearing temperature monitor. The change unmasked the monitor, but had no effect on any other system and did not impact plant operation. No unreviewed safety question was involved.

SE-97-277-TM

INSTALL AIR CONDITIONING UNIT

An additional air conditioning unit with an 18,000-Btu rating was installed in the cable spreading room to cool logic cards that were at an elevated temperature. The new unit was installed in the vicinity of an existing unit and was supplied by a temporary feed from a strip heater panel. Air distribution from the two units was coordinated to be most effective in cooling the logic cards. The additional unit does not perform a safety function and is not safety related. No unreviewed safety question was involved.

SE-97-278-EV

OPERATION WITH ROD CONTROL SYSTEM URGENT ALARMS PRESENT

Urgent failure alarms are generated by the rod control system when certain potential failures are detected. A study was undertaken to evaluate the safety of continued operation of the plant, up to and including 100% power, with control rod drive urgent failure alarm(s). The plant was not changed. The study showed the plant was designed to operate with urgent failure alarms present which could restrict rod motion but would not restrict trip capability in any way. No unreviewed safety question was involved.

SE-97-279-TM

CHEMICAL SYSTEMS BUILDING (CSB) SUMP TEMPORARY PUMP

A temporary pump was connected from the CSB sump to check valve LW-445 to pump down the CSB sump. The check valve used prevented back flow into the sump. The hose and fittings used in this temporary modification were compatible with the existing piping, and there was no requirement for the temporary pump to function following a seismic event. There were no safety related systems or pieces of equipment in the area of the temporary pump, and the pump and hose did not create a significant fire load in the

CSB sump area. The pump and hose did not challenge any CSB structure. No unreviewed safety question was involved.