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U.S. Nuclear Regulatory Commission
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SUBJECT: Indian Point 3 Nuclear Power Plant
Docket No. 50-286
License No. DPR-64
Code of Federal Regulations 10 CFR 50.59,
Annual Report of Changes, Tests and Experiments

Dear Sir:

This letter transmits the 1999 Annual Report of changes, tests and experiments conducted at the Indian Point 3 Nuclear Power Plant in accordance with 10 CFR 50.59 for the period of January 23, 1999 to January 22, 2000. The report, required by 10 CFR 50.59(b)(2), is contained as Attachment 1.

Each change, test or experiment has been reviewed to ensure that: the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report has not been increased; the possibility of an accident or malfunction of a different type than any evaluated previously in the safety analysis report has not been created; and the margin of safety as defined in the basis for any technical specification has not been reduced. The review concluded that these changes, tests and experiments did not involve any unreviewed safety question.

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Should you or any of your staff have questions concerning this matter, please contact Mr. Joe DeRoy, Director of Engineering at (914) 736-8006.

Entergy is making no commitments in this submittal.

Very truly yours,

for

Robert J. Barrett
Vice President Operations
Indian Point 3 Nuclear Plant

Attachment

cc: Hubert J. Miller
Regional Administrator
Region 1
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475 Allendale Road
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U.S. Nuclear Regulatory Commission
Resident Inspectors' Office
Indian Point 3 Nuclear Power Plant

1999 ANNUAL REPORT

NSE 92-3-125 SWS, REV. 6

PROVIDE ALTERNATE COOLING TO EDGS
DURING SWS VALVE REPAIR

Description and Purpose

The purpose of this NSE was to verify the operability of the Emergency Diesel Generators (EDGs) during the implementation of three Temporary Modifications (TMs) to provide alternate Service Water return flow paths for the EDG coolers.

Summary of Safety Evaluation

The TMs to all three EDGs were installed and required to facilitate repair/replacement of Service Water EDG outlet valves FCV-1176A and SWN-55 during Refuel Outage 10 (RO10). This NSE addressed the use of an alternate discharge path for the EDG SW return only. The TMs were placed in service when the plant was either at Power Operation with the output breaker shut, or after being in Cold Shutdown for at least five days with the head off the reactor vessel.

These TMs did not change the basic design of the EDG Heat Exchanger flow path. After the valves were repaired/replaced the TMs were removed which returned the plant to the same configuration that had existed. This modification did not create an unreviewed safety question.

1999 ANNUAL REPORT

NSE 92-3-264 RCS, REV. 2

CORE RELOAD FOR CYCLE 10

Description and Purpose

The purpose of Rev. 0 of this NSE was to establish controls on reload fuel selection, cycle design and core design for Cycle 10 to ensure compliance with NYPA procedures and energy requirements.

Revision 1 of this NSE incorporated additional information and documentation applicable to the Cycle 10 core reload that emerged during the R09 Refueling Outage.

Revision 2 of this NSE incorporated the results of the revised Reload Safety Evaluation from Westinghouse, which supported Cycle 10 operation through an extended burn-up and coast-down.

Summary of Safety Evaluation

The Cycle 10 core was designed in accordance with the requirements of the Technical Specifications, FSAR and Core Operating Limits Report (COLR) and analyzed to operate to a maximum burn-up of 23641 MWD/MTU, including a coast-down at End-of-Life. Changes to the core design were evaluated and it was demonstrated that operation throughout cycle life with the Cycle 10 core would not result in an unreviewed safety question.

1999 ANNUAL REPORT

NSE 93-3-419 CHRV, REV. 5

ADDITIONAL CENTRAL CONTROL ROOM HVAC COOLING

Description and Purpose

The purpose of this NSE was to implement corrective action to restore the ability of the Central Control Room (CCR) HVAC System to maintain 75° F in the CCR during normal operation with the outside air temperature at 93° F and the cooling water inlet temperature at 95° F.

Revision 5 of this safety evaluation addressed the requirement of the new A/C units for Appendix R compliance.

Summary of Safety Evaluation

This modification installed five independent A/C units to supplement the normal cooling capacity of the existing CCR HVAC System. These additional non-safety related supplemental A/C units enable the CCR HVAC system to maintain the normal operating design basis temperature.

As a result, the probability of occurrence or the consequences of an accident or malfunction of equipment evaluated previously in the FSAR has not been increased, nor has the possibility of an accident or malfunction of equipment of a different type than any previously evaluated in the FSAR been increased. Therefore no unreviewed safety questions would result from this modification.

1999 ANNUAL REPORT

NSE 94-3-029, REV. 1

SEISMIC VERIFICATION OF EQUIPMENT
BY SQUG GENERIC IMPLEMENTATION PROCEDURE (GIP)

Description and Purpose

The purpose of this NSE was to confirm that the use of Generic Implementation Procedure (GIP) as supplemented by NRC SSER No. 2 for the seismic design and verification of existing, modified, new and replacement equipment did not constitute an unreviewed safety question.

Summary of Safety Evaluation

This safety evaluation shows that no unreviewed safety question is created by the FSAR change and therefore, the use of the GIP methodology is acceptable. The use of the GIP will not affect the ability of safety-related equipment or equipment important to safety to perform required safety functions during or after a seismic event.

1999 ANNUAL REPORT

NSE 94-3-191, REV. 3

INDIAN POINT 3 & WHITE PLAINS OFFICE QA ORGANIZATIONS

Description and Purpose

This NSE describes and evaluates the reorganization of the Indian Point 3 (IP3) and White Plains Office (WPO) QA departments. Revision 3 of this NSE prepared minor changes to conform with the latest revision of MCM-4 (Nuclear Safety and Environmental Impact Screens and Nuclear Safety Evaluations). The consolidation of responsibilities allows the reorganization to maintain quality at IP3.

Summary of Safety Evaluation

The reorganization reflects re-assignment of position responsibilities and is designed to improve communications, responsiveness, and effectiveness of the QA organization by consolidating functional lines of responsibility. These changes have no effect, actual or potential, on the safety of the plant, do not affect the independence of scope of the QA organization, and do not degrade the QA Program. This evaluation ensured and documented that no unreviewed safety question existed in the reorganization of the IP3 and WPO QA staff.

1999 ANNUAL REPORT

NSE 95-3-022 SI, REV. 1

SAFETY INJECTION PUMP OVER PRESSURE PROTECTION

Description and Purpose

The purpose of this NSE was to demonstrate that the addition of a pressure equalization line on 32 Safety Injection Pump suction piping does not constitute an unreviewed safety question.

Revision 1 of this NSE showed modification configuration at partial turnover (RO-10). The modification would be installed in two phases: pressure equalization line and valves in RO-10, and reach rod installations after RO-10.

Summary of Safety Evaluate

This modification will be installed in separate phases. The first phase installed a pressure equalization line and three associated valves during the last outage. A partial Modification Turnover Document was completed to document the operability of the piping and valves. The Safety Injection System's function will not be altered from the pre-modification function. No unreviewed safety question exist as a result of this partial completed modification.

1999 ANNUAL REPORT

NSE 95-3-237 COMM, REV. 0

CONTROL ROOM UPGRADE MODIFICATION

Description and Purpose

This safety evaluation ensured that upgrades to and installation of the Control Room Work Stations, Page Party System and Telephones had no safety significance.

Summary of Safety Evaluation

The associated modification dealt solely with non-safety related equipment and systems which are not explicitly stated in the FSAR. The installation of this modification improved the control room supervisor's ability to oversee control room activities, added a new battery power supply to the telephone console, and upgraded the party page system. There were no unreviewed safety questions.

1999 ANNUAL REPORT

NSE 95-3-273 RCS, REV. 1

IN-VESSEL AND EX-VESSEL DOSIMETRY

Description and Purpose

This NSE evaluated the installation of the following: two in-vessel radiometric dosimeters; and eight strings of high-precision sapphire neutron detectors in four ex-vessel locations.

Revision 1 of this NSE evaluated leaving the in-vessel dosimeter in place at the guide basket location Y beyond Refueling Outage 10 (RO 10). All other dosimetry installed by this modification was permanently removed in RO 10.

Summary of Safety Evaluation

The in-vessel and ex-vessel dosimetry was installed in and around the reactor vessel during Refuel Outage 9. All dosimetry, except for the in-vessel dosimeter at guide basket location "Y" was removed during RO 10. The remaining in-place dosimetry has no effect on the safe operation of the plant, as it has no effect on core flow. This modification does not result in an unreviewed safety question because it does not result in any change to or degrade the RCS.

1999 ANNUAL REPORT

NSE 95-3-287 ED(DCPWR), REV. 2

EDG EXHAUST FAN MOTOR/STARTER/FEED CHANGES

Description and Purpose

The purpose of this NSE was to provide additional information acquired since the issueance of NSE Revision 1, and MMP Revision 0, and to satisfy a commitment for NSE update.

Summary of Safety Evaluation

This NSE assessed the following information: (a) the pre-refuel outage 9 alignment of power feeds to Emergency Diesel Generator (EDG) Exhaust Fans and other auxiliaries; (b) the increase in the size of the EDG Exhaust Fan Motors form 7.5 HP to 10 HP (exhaust fan 314 being the only one changed out thus far); (c) the testing to ensure the proper operation of all equipment and (d) it ensured the MMP and NSE will be revised to reflect updates applicable to reference and drawing listings from an administrative perspective.

This modification involved changes that connected deficiencies. The implementation of this modification ensured that the margin of safety defined in the technical specifications for EDG availability and operability continued to be met and created no new unreviewed safety questions.

1999 ANNUAL REPORT

NSE 96-3-060 CW, REV. 1

RETIREMENT OF OUTLET WATERBOXES LEVEL CONTROLLERS AND ASSOCIATED CONDENSER OUTLET WATERBOX LOW LEVEL ALARM

Description and Purpose

The purpose of this NSE was to evaluate the retirement of the level controllers located on the outlet waterboxes of the condensers, its associated low waterbox level alarm in the Control Room (CR), and the elimination of the alarm in the CR.

Summary of Safety Evaluation

The modification removed from operation the six level controllers associated with the outlet waterboxes on the main condensers and the associated common low waterbox level alarm in the Control Room. Previous modifications to the system have resulted in a waterbox configuration which does not require the outlet waterbox level to be monitored under all conditions. For conditions where waterbox level needs to be monitored, alternate means are available to discover the problem in a timely manner. This modification created no unreviewed safety questions.

1999 ANNUAL REPORT

NSE 96-3-143 LWD, REV. 1

IP3 LIQUID WASTE DISPOSAL SYSTEM WITH CONTRACTOR PROCESSING SYSTEM WITHOUT the AVAILABILITY OF the UNIT 1 RADWASTE INTERTIE

Description and Purpose

The purpose of this NSE was to demonstrate that continued operation of the IP3 Radioactive Liquid Waste Disposal System without Unit 3 to Unit 1 Radioactive Liquid Waste Intertie Line (referred to as the Radwaste Intertie) is consistent with the FSAR design criteria and does not constitute an unreviewed safety issue. This evaluation is the basis for the minor modification to sever and retire the RADWASTE INTERTIE to Unit 1 and is also the basis for operation of the IP3 contractor processing system without the intertie capability.

Summary of Safety Evaluation

The separation modification on the NYPA/ Con Edison tie line, including the retirement of the disconnected section of the tie-line piping and associated heat trace, in conjunction with the use of the contractor liquid waste processing skid alone will not: a) conflict with any design basis stated in the FSAR, b) result in changes to Technical Specifications, c) result in changes to Operational Specifications, d) negatively impact any safety related or environmentally qualified structures, systems or components, or e) cause any unreviewed safety question.

1999 ANNUAL REPORT

NSE 96-3-224 AFW, REV. 4

AUX FEEDWATER SYSTEM PURGE VOLUME AND CST TEMPERATURE EFFECTS

Description and Purpose

The purpose of this NSE was to re-evaluate the loss of normal Feedwater Analysis and incorporate revisions and conclusions based on the findings indicated in the previous revision.

Summary of Safety Evaluation

Revision 3 of this NSE re-evaluated the loss of normal Feedwater Analysis and revised the maximum Condensate Storage Tank temperature to 105° F at full power and 120° F for power no greater than 95%.

Revision 4 supports the conclusion of revision 3 by adding revised tables and figures to the FSAR.

Implementation of the analytical changes, identified in this NSE does not reduce the margin of safety, as defined in the basis of any Technical Specification nor does it involve an unreviewed safety question.

1999 ANNUAL REPORT

NSE 96-3-289 FHS, REV. 0

FUEL TRANSFER SYSTEM UPGRADE

Description and Purpose

The NSE for this modification assured that the newly installed Fuel Transfer System Upgrade, consisting of a semi automatic control system with interlock protection, conformed with the existing safety analysis report requirements.

Summary of Safety Evaluation

This design replaced the existing control system on the Fuel Transfer System with industry proven reliable Programmable Logic Controller (PLC) based controls. The associated peripheral control devices were replaced with reliable industry proven qualified products. The overall performance of the fuel handling equipment was not changed. These changes improved on the existing equipment and met all existing criteria without changing the basic method of moving fuel. The changes increased reliability and decreased maintenance time without impacting safety features. There are no unreviewed safety questions.

1999 ANNUAL REPORT

NSE 96-3-395 FP, REV. 0

DEVELOPMENT OF ADMINISTRATIVE PROCEDURE AP-64.1
AND EVALUATION OF A CHANGE TO
OPS SPEC 3.2 AND 3.5

Description and Purpose

This NSE evaluated the change to the approved Fire Protection Program for its impact on nuclear safety and the ability to achieve and maintain safe shutdown in the event of a fire.

Summary of Safety Evaluation

This NSE clarified the Fire Protection System design and licensing basis and implemented consistency between the administrative controls for Appendix R equipment operability and the Appendix R Safe Shutdown Analysis. This change did not increase the consequences of a fire evaluated previously in the Appendix R Safe Shutdown Analysis, and did not adversely affect the ability to achieve and maintain safe shutdown in the event of a fire. There are no unreviewed safety questions.

1999 ANNUAL REPORT

NSE 96-3-508 SWS, REV. 1

REPLACEMENT OF ISOLATED PHASE BUS COOLING SERVICE WATER LINES

Description and Purpose

The purpose of the NSE for this modification was to provide for the one-for-one replacement of Service Water piping and valves with a 6% Molybdenum (Mo) austenitic stainless steel to improve corrosion resistance.

Summary of Safety Evaluation

The modification of the Isophase Bus Heat Exchangers Service Water supply and return piping and components is a functionally equivalent system. The material change offers a better resistance to corrosion which improves the components and provides for a more reliable system. Therefore, this change did not adversely affect the continued operation of the plant and did not represent a potential unreviewed safety question.

1999 ANNUAL REPORT

NSE 96-3-542 SWS, REV. 0

BACKUP SERVICE WATER PUMP ZURN STRAINER PIPING REPLACEMENT

Description and Purpose

The purpose of this NSE was to provide justification for the replacement of the Service Water (SW) piping and valves with 6% molybdenum (Mo) austenitic stainless steel to improve corrosion resistance.

Summary of Safety Evaluation

This modification of the Backup SW Pump Strainer backwash piping provided a functionally equivalent system. The new valves provided more flexibility for operation, maintenance, and repair activities. The new isolation valves did not adversely affect continued operation of the plant and did not represent a potential unreviewed safety question.

1999 ANNUAL REPORT

NSE 97-3-219, REV. 1

DRAIN TRAP REPLACEMENT FOR SJAE

Description and Purpose

The purpose of the NSE was to evaluate the piping changes associated with the replacement of the drain traps off 31, 32 and 33 Steam Jet Air Ejectors (SJAE) after Condenser and Suction Blower 31 (SB31).

Summary of Safety Evaluation

This modification replaced obsolete drain traps for the SJAE and SB31 and incorporated suitable materials for the environmental conditions affecting the traps. The replaced traps have improved materials and lessen the chance of trap malfunction. A strainer was installed upstream of the replacement trap to prevent pipe crud from getting into the trap and affecting operation. The replacement of the traps does not negatively affect the operation or design of the SJAE, SB31 or R-15 radiation monitor systems. Therefore, there are no unreviewed safety questions.

1999 ANNUAL REPORT

NSE 97-3-227 VCHVP, REV. 1

OPERATION OF the PAB/VC EXHAUST FAN
WITHOUT the PURGE SUPPLY FAN
OR WITH REDUCED VC MAKE UP AIR FLOW

Description and Purpose

This NSE demonstrated that Vapor Containment (VC) purging, without the purge supply fan in operation or with reduced VC make-up flow, does not adversely affect overall plant safety. The purpose of Revision 1 was to review the ventilation configuration changes while the plant is in an outage.

Summary of Safety Evaluation

This NSE evaluated the operation of the containment purge system without running the containment purge supply fan or with reduced VC inlet air flow while the supply fan is running. This will ensure that a negative pressure will exist inside the VC and will prevent the containment atmosphere from venting outside the VC and not cause discernible air movement into or out of the 80 foot airlock. This mode of operation is only performed at cold shutdown conditions when containment integrity is removed. There are no unreviewed safety questions.

1999 ANNUAL REPORT

NSE 97-3-241 RM, REV. 2

REPLACEMENT OF RMS CHANNELS -2, R-4, R-6, R-7, R-8, R-14, R17A AND R-17B; REMOVAL OF PROCESS RADIATION MONITORING SYSTEM CHANNEL R-13 FROM SERVICE; ADDITION OF R-62 TO BANTAM-11; REVISION OF FSAR CHANGE REQUIREMENTS

Description and Purpose

The purpose of this NSE was to demonstrate that the installation and testing of Mod 97-3-241 RM, which replaced obsolete Tracer Lab components and replacement parts no longer supported by the vendor, did not create an unreviewed safety question.

Summary of Safety Evaluation

This modification replaced obsolete Tracer Lab detector and indicator components in the area Radiation Monitoring System and the Process Radiation Monitoring System. Additionally, this modification removed PRMS Channel R-13 from service, connected PRMS Channel R-62 to the Bantam-11 RMS computer and made minor revisions to the ODCM. None of these changes reduce the margin of safety for the RMS, or present an unreviewed safety question.

1999 ANNUAL REPORT

NSE 97-3-270, REV. 1

CONTROL ROOM AIR CONDITIONING FILTRATION SYSTEM NEW FLOWS AND PRESSURES

Description and Purpose

The purpose of this NSE was to revise the flow rate and differential pressure (DP) for the Control Room Heating Ventilation & Air Conditioning (CR HVAC) filtration system. Revision 1 of this NSE incorporates the results of Calculation 83990.164-2HVAC-092, Rev.4. The calculation established the acceptance criteria for the surveillance test requirements.

Summary of Safety Evaluation

This NSE defined the new flow rate and DP for the CR HVAC filtration system. The flow rates are based on licensing and current plant design basis criteria for 31 days of hands off operation of the CR booster fans in the 10% incident mode. This forms the basis for the acceptance criteria for the surveillance test requirements. It was concluded that based on the completed evaluations and analysis that the new flow rate and DP will meet the design and operability requirements for CR HVAC accident mitigation. There are no unreviewed safety questions.

1999 ANNUAL REPORT

NSE 97-3-320 AFW, REV. 0

PCV-1139 Valve and Controller Replacement

Description and Purpose

The purpose of this NSE was to replace the Turbine-Driven Auxiliary Feedwater Pump Pressure Control Valve, CV-1139, which is obsolete and for which spare parts are unavailable.

In addition, the pneumatic control system associated with PCV-1139, which was not providing adequate steam pressure control during a Turbine-Driven Auxiliary Feedwater Pump (AFWP) start, was replaced.

Summary of Safety Evaluation

This modification replaced the existing PCV-1139 carbon steel valve with a stainless steel valve. This replacement does not increase the probability of a malfunction of this piece of equipment.

The new control system improves the operation of the pressure control valve both by eliminating pressure transients during start-up and providing better process control. The setpoint ramp portion of the control system provides the turbine with a controlled opening of PCV-1139, eliminating the pressure control problem with steam supplied to the turbine.

These changes did not reduce the margin of safety as defined in the basis of any Technical Specification and do not cause an unreviewed safety question.

1999 ANNUAL REPORT

NSE 97-3-329 SI, REV. 1

CHANGE BIT ISOLATION VALVES POSITION FROM NORMALLY CLOSED TO OPEN

Description and Purpose

This NSE evaluated the acceptability of maintaining the Boron Injection Tank (BIT) isolation valves (SI-1835A&B and 1852A&B) in the open position during normal operations. Revision 1 to this NSE clarified the equipment capability concern presented when any of the BIT isolation motor operated valves (MOV) are closed, and revised the FSAR to make this requirement clear.

Summary of Safety Evaluation

This evaluation justified changing the normal positions of valves SI-1835A&B and SI-1852A&B from closed to open. These changes do not alter the function or the BIT flowpath, and do not challenge the integrity of any affected components. The functional elimination of the Boron Injection Tank has eliminated the design requirement for these valves to be closed during normal power operations. This change increases the safety of the plant by eliminating the reliance of the active safety function of these valves to open in order to achieve the required performance of the high head safety injection system. Revision 1 of this NSE clarifies the equipment capability concern presented when any of the BIT isolation MOVs are closed.

Additionally, this evaluation addressed the containment isolation function of valves SI-1835A&B. Changing the normal position of these valves from closed to open does not impact their containment isolation function because an accident results in these valves opening . Therefore, there are no unreviewed safety questions.

1999 ANNUAL REPORT

NSE 98-3-019 SFPC, REV. 4

BACK-UP SPENT FUEL POOL COOLING SYSTEM

Description and Purpose

The purpose of this NSE was to evaluate a means of maintaining the Spent Fuel Pool (SFP) cooling function for a limited time period while the existing cooling system was not available due to maintenance. This modification installed a permanent and independent Back-up Spent Fuel Pool Cooling System (BSFPCS). This system is capable of operation during all plant modes and provides the means to cool the SFP for a limited time period while the existing cooling system is not available due to maintenance.

Summary of Safety Evaluation

The physical design of the BSFPCS and the high degree of its independence from existing plant systems precludes it from increasing the possibility or consequences of any accident or malfunction discussed in the SAR. There are no unreviewed safety questions.

1999 ANNUAL REPORT

NSE 98-3-021 RPC, REV. 1

PROVIDE DESIGN BYPASS TO PERFORM TESTING OF REACTOR PROTECTION SYSTEM CHANNELS

Description and Purpose

The purpose of this NSE was to evaluate the Minor Modification Package (MMP 98-3-021). This modification would provide trip bypass capability during surveillance testing of the Reactor Protection System (RPS) and Engineered Safety Feature Actuation System (ESFAS) instrument channels.

Summary of Safety Evaluation

This modification permanently installed the capability to test the RPS and ESFAS instrument channels in trip bypass mode in order to reduce the risk of spurious unit trip(s) during on-line surveillance testing. There are no unreviewed safety questions.

1999 ANNUAL REPORT

NSE 98-3-047, REV. 1

TORNADO IMPACT AT the R-16A AND B
DETECTOR ASSEMBLIES

Description and Purpose

This evaluation demonstrated that although the west wall on the 15 foot elevation of the Vacco Filter Room in the Primary Auxiliary Building is not designed to withstand the impact of a tornado, the subsequent potential loss of the radiation monitoring detector assemblies for containment fan cooler unit service water liquid activity, and/or potential loss of the associated service water line, will not adversely impact the ability to safely shutdown the plant.

Summary of Safety Evaluation

This NSE demonstrates that reactor safety is not adversely impacted by the installation of the radiation monitoring detection assemblies for containment fan cooler unit service water liquid activity and their associated service water line in an area unprotected from missiles which can be generated by a tornado. There are no unreviewed safety questions.

1999 ANNUAL REPORT

NSE 98-3-051, REV. 2

MANDATORY PWHT EXCEPTION FOR USE ON NON-CAT1, SEISMIC CLASS III LOW ALLOY STEEL PIPE COMPONENTS

Description and Purpose

The purpose of this NSE was to evaluate the acceptability of not performing a Post Weld Heat Treatment (PWHT) for low alloy, chromium-molybdenum (Cr-Mo) pipe and components installed as replacement material for pipe which is degraded due to erosion corrosion.

In addition, this NSE addressed the permanent removal of four drain valves from the heater drain system.

Summary of Safety Evaluation

This NSE adopts the revision to the ASME B31.1 Code described in Code Case 96-35 which exempts PWHT requirements for all P- 4 and P-5A piping meeting certain criteria. The exemption from mandatory PWHT in this evaluation meets that criteria and does not increase the probability of an occurrence or consequence of an accident or malfunction of safety related structures, systems, or components previously evaluated in the FSAR because the pipe systems which will use this exemption are not safety related and are not used in any Safety Analysis documented in the FSAR. Pipe replaced with P-4 or P-5A material and exempted from PWHT will be more reliable for the saturated water service, then the existing pipe material.

Additionally, the removal of heater drain valves 5-HD-118 through 121 is acceptable since they were not required for venting or draining the affected piping. Removal of these valves does not affect either normal system operation or vent and drain activities because these valves serve no safety function. There are no unreviewed safety questions.

1999 ANNUAL REPORT

NSE 98-3-056 IVSWS, REV. 1

INSTALL TEST CONNECTIONS
IN the ISOLATION VALVE SEAL WATER SYSTEM

Description and Purpose

This NSE evaluated the installation of test connections in the Isolation Valve Seal Water System (IVSWS) which provides the capability of performing individual local leak rate tests of the containment isolation valves.

Revision 1 of this NSE provided justification for not locking the vent valves and test connections in the closed position and for performing installation of certain portions of the modification while on line.

Summary of Safety Evaluation

This modification added vent and test connections to the IVSWS. All of the vent and test valves in this portion of the modification are administratively controlled as closed and each one has a cap installed on the end of the line. Therefore it was not credible to consider it as a new source of system leakage.

The function, pressure class and pressure retaining capability of the IVSWS and all of its components was not altered. The capability to test them was improved, providing a more reliable system. Therefore this change does not adversely affect the continued operation of the plant and does not represent a potential unreviewed safety question.

1999 ANNUAL REPORT

NSE 98-3-062 MTG, REV. 0

UPGRADE OF MAIN GENERATOR NEGATIVE PHASE SEQUENCE RELAY

Description and Purpose

The purpose of this NSE was to evaluate the impact of design change 98-3-062 to upgrade the Main Generator Negative Phase Sequence Relay, the resulting changes to the FSAR and to ensure there were no adverse affects to nuclear safety.

Summary of Safety Evaluation

The existing relay was not sensitive enough to detect the negative sequence current (I_2) generated during an open phase condition in the IP3 generator output circuit prior to permanent generator damage. The new relay ensures that the IP3 generator is protected from the potential thermal damage resulting from the fault condition previously described in the NSE. The designations removed from the FSAR do not affect the intent of the figure nor do they have any adverse impact on nuclear safety There are no unreviewed safety questions.

1999 ANNUAL REPORT

NSE 98-3-080 WTS, REV. 0

CONTRACTOR WATER TREATMENT SYSTEM (CWTS)

Description and Purpose

The purpose of this NSE was to demonstrate that the Permanent Tie-Ins for the Contractor Water Treatment System (CWTS) Modification, complied with the licensing and design basis documents maintained in the Safety Analysis Report (SAR) and did not affect Technical Specifications.

Summary of Safety Evaluation

Design Change Package 98-3-080 installed a Contractor Water Treatment System at IP3 to produce higher quality, more reliable, and more cost effective water. As a result of this CWTS installation, the Permanent Water Factories will be retired.

The installation, operation of the CWTS and retirement of the water factories is safe and does not raise an unreviewed safety question.

1999 ANNUAL REPORT

NSE 98-3-083 ADMIN, REV. 0

TEMPORARY STORAGE OF
QUALITY ASSURANCE RECORDS

Description and Purpose

The purpose of this NSE was to evaluate a provision of the Records Management Program which permits the temporary storage of quality assurance records until they are turned over to Records Management for permanent storage.

Summary of Safety Evaluation

The storage of quality assurance records in a 1-hour fire rated file cabinet maintains sufficient protection of quality assurance records as intended by 10CFR50, Appendix B. The change does not alter the design, operation or function of any structure, system or component used to directly or indirectly mitigate accidents evaluated previously in the FSAR, nor alter an initiator or add any new initiators of accidents. Additionally, the change does not reduce the margin of safety as defined in the basis of any Technical Specification. As such, the change does not constitute an unreviewed safety question.

1999 ANNUAL REPORT

NSE 98-3-085 FP, REV. 1

CHANGES TO THE IP3 FIRE PROTECTION PROGRAM
AS DESCRIBED OR DEPICTED IN THE FSAR

Description and Purpose

The purpose of this NSE was to clarify or correct provisions of the IP3 Fire Protection Program as described or depicted in the FSAR to eliminate ambiguity or reflect the as-built design of the Fire Protection System. Revision 1 of this NSE revised the FSAR to add the design and licensing bases of fire barrier penetration seals.

Summary of Safety Evaluation

The provisions of the IP3 Fire Protection Program as described or depicted in the FSAR do not alter the design, operation or function of any structures, systems and components used to directly or indirectly mitigate accidents evaluated previously in the SAR, nor alter an initiator of accidents previously evaluated in the SAR, or add any new initiators of accidents. Additionally, the changes do not reduce the margin of safety as defied in the basis of any Technical Specification as the Fire Protection Program is not described in the Technical Specifications or related bases. There are no unreviewed safety questions.

1999 ANNUAL REPORT

NSE 98-3-107, REV. 0

CHANGE P-7 RX TRIP TO P-8

Description and Purpose

This NSE evaluated the relocation of Reactor Trip on Turbine Trip Permissive function from the current location Permissive Relays P-7-1 and P-7-2 (Trains A & B), to the locations of P-8-1 and P-8-2 (Trains A & B).

Summary of Safety Evaluation

This modification relocated the P-7 Reactor Trip on Turbine Trip Permissive Function to P-8 and lowered the P-8 setpoint from 48% Reactor Thermal Power (RTP) to 35% RTP. All other P-7 functions remain with P-7 at the current setpoint (10%). This change does not decrease the margin of safety as identified in the basis of any technical specification and does not result in an unreviewed safety question.

1999 ANNUAL REPORT

NSE 98-3-131 ESS, REV. 0

REQUIRED POST-LOCA RECIRCULATION FLOW

Description and Purpose

The purpose of this NSE was to establish an appropriate revised minimum indicated recirculation flow to be used in Emergency Operating Procedure ES-1.3 as a function of the number of indicating flow meters. In addition, it established appropriate procedural guidance for the securing of the containment spray system subsequent to a LOCA. This NSE also provides revisions to Section 6 of the FSAR to clarify the design basis post-LOCA response of the Safety Injection (SI) recirculation system.

Summary of Safety Evaluation

This NSE addressed post-LOCA recirculation flow requirements, specifically the minimum flow to ensure core cooling and a nominal (indicated) containment spray flow. The implementation of the recirculation flow rates and methodology presented in this NSE does not involve an unreviewed safety question.

1999 ANNUAL REPORT

NSE 98-3-138 RCS, REV. 3

CORE RELOAD FOR CYCLE 11

Description and Purpose

The purpose of this NSE was to evaluate the established controls on reload fuel selection, cycle design and core design for Cycle 11 to ensure compliance with NYPA procedures and energy requirements. Fuel cycle and core design had to allow for full-power plant operations within the bounds of all safety evaluations as reflected in the FSAR, the Technical Specifications (Tech Spec) and the Core Operating Limits Report (COLR).

Summary of Safety Evaluation

The Cycle 11 core has been designed in accordance with the requirements of the Tech Specs, FSAR and COLR, and provides adequate energy to allow full-power plant operation at a capacity factor of 90-95% until Spring of 2001. This NSE listed and evaluated the changes to the core design that have been incorporated. The Cycle 11 reload core does not increase the probability of occurrence of an accident evaluated in the safety analysis and does not present an unreviewed safety question.

1999 ANNUAL REPORT

NSE 98-3-151 SI, REV. 0

EVALUATION OF CHANGES TO ES-1.3

Description and Purpose

This NSE evaluated the changes to the Emergency Operating Procedure (EOP) ES-1.3, "Transfer to Cold Leg Recirculation", which was revised in order to simplify the operator actions necessary to effect this transfer. This revision, to ES-1.3, included multiple changes to the steps performed and their sequencing during this transfer to cold leg recirculation.

Summary of Safety Evaluation

This safety evaluation was required because the FSAR provides explicit descriptions of these steps and their sequencing during the transfer to cold leg recirculation. The revised procedural steps which effect the transfer to cold leg recirculation, low and high head, and the transfer to containment spray recirculation provide an overall enhancement to the procedure, and optimize the sequencing and effectiveness of steps which ensure core and containment cooling. This latest revision to ES-1.3 operates all systems and components within their design limits, and ensures that no single failure of an active component could defeat a safety function. The changes and improvements presented in ES-1.3 ensure that consequences of an accident remain limited to within analyzed limits. There are no unreviewed safety questions.

1999 ANNUAL REPORT

NSE 98-3-156, REV. 1

CH-342 REPLACEMENT

Description and Purpose

The purpose of this NSE was to evaluate the replacement of CH-342 with a live load packing arrangement by eliminating the leak-off line.

Summary of Safety Evaluation

The existing CH-342 valve had a lantern ring and a leak-off connection to provide for stem leak-off control. This NSE evaluated the replacement of CH-342 with a valve without a leak-off connection. It does not violate any Westinghouse design criteria or any activity or criteria described in the FSAR. Live load packing and backseat design are sufficient to ensure Reactor Coolant System (RCS) leakage control into Containment. CH-342 replacement without the stuffing box leak-off line does not adversely affect the operation, design or maintenance of the RCS and Volume Control Letdown System in regards to the FSAR evaluation of potential leakage from the Reactor Coolant System. There are no unreviewed safety questions.

1999 ANNUAL REPORT

NSE 98-3-161 MULT, REV. 0

VALVE DESIGN AND BOLTED JOINT TORQUE REQUIREMENTS

Description and Purpose

The purpose of this NSE was to determine if revising/clarifying IP3 FSAR Section 5.1.2.5 "Containment System Structure Design-Missile Protection-Valves" resulted in an unreviewed safety question.

Summary of Safety Evaluation

This NSE provided clarification to FSAR Section 5.1.2.5. The subject section was edited to correct the design codes used to fabricate the valves in containment, eliminate the torquing limitations and revise the evaluation of the valve stems. It was concluded that no unreviewed safety question exists since the changes will not result in a) any physical change to equipment in the plant nor b) any change to the ability of the existing plant equipment from performing their intended functions.

1999 ANNUAL REPORT

NSE 99-3-004, REV. 0

EMERGENCY DIESEL GENERATOR (EDG) SHORT-TERM CAPACITY RATING CLARIFICATION

Description and Purpose

This evaluation clarifies the definitions of "continuous rating" and "2-hour rating" for the EDGs and adds definitions for "2000-hour rating" and the "1/2-hour rating," to properly reflect relevant manufacturer and historical information. As a result of this clarification, operation of an EDG up to and including the "2-hour rating" of 1950 kW will no longer result in the EDG being considered inoperable for the subsequent 22 hour period.

Summary of Safety Evaluation

Establishing a continuous rating of 1750kW, a "2-hour rating" of 1950 kW, a "2000-hour rating of 1950 kW, and a "1/2-hour rating" of 2000 kW ensures that appropriate maintenance and inspections are performed so that the EDG will be capable of performing its design function.

This clarification does not involve any physical configuration changes. No new operational concerns, interactions, transients or accidents are introduced. This clarification does not affect, either directly or indirectly, any emergency preparedness provision or the bases for these provisions. There are no unreviewed safety questions.

1999 ANNUAL REPORT

NSE 99-3-009 AFW, REV. 0

TURBINE-DRIVEN AUXILIARY BOILER FEED PUMP
DESIGN BASIS

Description and Purpose

The purpose of this NSE was to define the design basis flow requirements for the turbine driven Auxiliary Feedwater Pump (32 AFWP). The FSAR credits AFWP drivers powered from diverse means (i.e., two electric pumping drivers and a steam powered pumping driver) as capable of mitigating accidents and transients. Although the presumption of multiple failure falls beyond the design basis of the plant, this NSE provides technical requirements for pump performance during a postulated scenario in which both motor-driven AFWPs are presumed unavailable. This NSE established bases for pump test criteria and procedural guidance.

Summary of Safety Evaluation

This NSE describes the NYPA/Westinghouse accident analyses supporting operation of the 32 ABFP, based on the assumption that this is the only operating ABFP. This NSE concluded that the 32 ABFP is capable of satisfying the design criteria of preventing primary coolant from discharging liquid from the pressurized power operated relief valve (PORV) or the safety relief valve after a loss of normal feedwater, a loss of AC power or a small break LOCA, provided that a flow from 32 ABFP is at least 596 gpm and that pump flow begins no later than 10 minutes after reactor trip (without coincident SI actuation) and 300 gpm no later than 15 minutes after trip (with coincident SI actuation). This NSE provides technical requirments for pump performance during a postulated scenario in which both motor driven pumps are presumed unavailable. This presumption of multiple failure falls beyond the design bases of the plant. Therefore, this NSE was prepared exclusively for the purpose of establishing pump test criteria and procedural guidance. The establishment of the flow requirements for 32 ABFP presented in this NSE does not create the possibility of an accident of a different type than any evaluated previously in the safety analysis report. There are no unreviewed safety questions.

1999 ANNUAL REPORT

NSE 99-3-011 CVC, REV. 0

CONTAINMENT FAN COOLER ROUGHING FILTERS

Description and Purpose

The purpose of this NSE was to determine if revising IP3 FSAR Section 6.4.2 "Containment Fan Cooler Units", regarding the use of roughing filters, results in an unreviewed safety question.

Summary of Safety Evaluation

FSAR Section 6.4.2 "Containment Cooling System Characteristics" was revised to delete "roughing filters" from the list of components which make up the air circulation system, and the description which states when the roughing filters are used was revised to delete "any time the reactor is down". It was concluded that no unreviewed safety question exists since the changes will not result in any physical change to equipment in the operating plant nor any change to the ability of existing plant equipment from performing their intended safety function.

1999 ANNUAL REPORT

NSE 99-3-013 WCCPP, REV. 1

INSTALLATION OF AN ISOLATION VALVE ON THE EXHAUST PORT OF PS-SOV-1280

Description and Purpose

The purpose of this NSE was to establish whether or not an unreviewed safety question would result from the installation of Temporary Modification (TM), TM 99-00644-09 to the Weld Channel and Containment Penetration Pressurization System (WCCPPS).

The purpose of this Temporary Modification was to allow performance of containment pressure relief without a required entry into a 7-day LCO or the need to lift a lead to support containment pressure relief operation.

Summary of Safety Evaluation

TM 99-00644-09 installed an isolation valve and capped pipe extension off the exhaust port of PS-SOV-1280. This TM installation is a corrective action to an identified containment isolation concern.

The TM to the WCCPPS did not result in an unreviewed safety question because it does not result in any change to or degrade the WCCPPS, or the containment pressure relief line CIVs. The short duration portion of the containment pressure relief operation which creates a containment release path to the PAB still does require prior entry into a 1 hour LCO per Technical Specification 3.6.A.3.

1999 ANNUAL REPORT

NSE 99-3-021 HVAC, REV. 0

CENTRAL CONTROL ROOM AIR CONDITIONING
FBF 31-32B INLET DAMPER B ACTUATION

Description and Purpose

This NSE evaluated the safety implications, if any, of mechanically positioning Central Control Room Air Conditioning (CCRAC) system damper B in the equivalent of its 10% incident mode position and disconnecting the air actuator, in accordance with Temporary Modification (TM), TM 98-03020-04.

Summary of Safety Evaluation

CCRAC Damper B will be temporarily pre-positioned to pass incident mode required airflow under TM 98-03020-04. The TM would also disconnect the actuator and effectively preclude closure of the damper in the event of a demand for isolation if (100%) CCR recirculation was required. While damper B will be considered inoperable for the duration of the TM, the operability of the CCRAC system is unaffected. The CCRAC system will continue to be capable of performing its normal operating and accident functions while the TM is in place. There are no unreviewed safety questions.

1999 ANNUAL REPORT

NSE 99-3-023 MBFP, REV. 0

MBFP FIRST OUT SYSTEM PANEL RETIREMENT

Description and Purpose

The purpose of this NSE was to evaluate the retirement of the Main Boiler Feed Pump (MBFP) First Out System Panels.

Summary of Safety Evaluation

IP3 Design Package (DCP) 99-3-023 retired the MBFP First Out System Panels. The MBFP First Out System was installed as part of Modification 90-3-125 to replace the existing trip alarm status indication. The first out trip and alarm reporting network was intended to aid in diagnosing the cause(s) of a MBFP trip. The problems that were causing MBFP turbine trip have since been fixed and the retirement of the MBFP First Out System eliminates the potential for any Y2K concerns. This Design Change does not affect any safety related or important to safety components, systems, structures or interfaces. There are no unreviewed safety questions.

1999 ANNUAL REPORT

NSE 99-3-027, REV. 1

CORPORATE AND SITE ORGANIZATIONAL CHANGES

Description and Purpose

The purpose of this NSE is to describe and evaluate proposed changes to the NYPA organizational structure, as described in the IP3 FSAR. These changes involved the creation and deletion of management positions and reassignment of position responsibilities and reporting relationships.

Summary of Safety Evaluation

These changes do not eliminate any functional requirements. The changes are administrative in nature and do not involve plant equipment or operating conditions. They will not reduce the effectiveness of the management of activities or of the oversight of plant operations. Therefore, these changes do not involve an unreviewed safety question.

1999 ANNUAL REPORT

NSE 99-3-028 FP FRW, REV. 0

ISOLATION OF THE HYDRO-PNEUMATIC TANK (FP-T-4)
FROM THE FIRE PROTECTION SYSTEM

Description and Purpose

The purpose of this evaluation reviews a change to the Fire Protection System (FPS) to isolate hydro-pneumatic tank FP-T-4 from the FPS distribution header.

Summary of Safety Evaluation

This NSE evaluated the mechanical isolation of FP-T-4 tank from the FPS. The tank will be isolated at its 1-1/2 inch pipe connection to the FPS distribution header, and administration air will be isolated from the tank. The change to the FPS, as depicted in the FSAR, does not alter the design, operation or function of any structure, system or component used to directly or indirectly mitigate accidents evaluated previously in the SAR, nor alter an initiator of accidents previously evaluated in the SAR or add any new initiators of accidents. There are no unreviewed safety questions.

1999 ANNUAL REPORT

NSE 99-3-032 SI, REV. 0

SAFETY INJECTION (SI) ACCUMULATOR CHECK VALVE DESIGN LEAKAGE

Description and Purpose

The purpose of this NSE was to determine the safety significance of correcting the manufacturer's maximum allowable check valve leakage which directly impacts the quantitative results of this analysis as described in the FSAR.

Summary of Safety Evaluation

The Safety Injection (SI) accumulator check valve leakage acceptance criterion currently in the FSAR does not reflect the acceptance criterion used by the valve manufacturer. The FSAR is revised to show the manufacturer's information. The leakage rate was increased from 2cc/hr/in to 10 cc/hr/in of nominal valve size. This increase in leakage rate impacted the predicted accumulator drain frequency and the FSAR is revised accordingly. The leakage rate increase has been evaluated not to involve an unreviewed safety question.

1999 ANNUAL REPORT

NSE 99-3-035 SFPC, REV. 0

USE OF RWST PURIFICATION LOOP
DURING PLANT OPERATION

Description and Purpose

This NSE evaluated the operation of the non-safety related, non-seismic, Refueling Water Storage Tank (RWST) purification loop with administrative controls by providing local valve operation prior to the Reactor Coolant System (RCS) being in Cold Shutdown (CSD).

Summary of Safety Evaluation

The operational configuration change evaluated in this NSE will allow the purification system isolation valves be opened at the seismic boundary of the RWST piping provided a trained, dedicated person is available to perform prompt isolation if required. Administrative controls will be in effect to ensure that sufficient RWST inventory is maintained above the minimum Technical Specification level whenever the loop isolation valves are opened. There are no unreviewed safety questions.

1999 ANNUAL REPORT

NSE 99-3-040 MTG, REV. 0

USING ULTRASONIC (UT) INSPECTIONS TO EXTEND LOW PRESSURE TURBINE EQUIVALENT OPERATING HOURS (EOH)

Description and Purpose

This evaluation demonstrates the acceptability of using Low Pressure Turbine Ultrasonic Inspection to extend an additional 30,000 Equivalent Operating Hours without the performance of a Low Pressure Turbine major overhaul.

Summary of Safety Evaluation

The new inspection program will allow NYPA to overhaul and inspect one Low Pressure Turbine each outage instead of three Low Pressure Inspections at the same time. This change does not result in any degradation to the Low Pressure Turbine capability. This evaluation determined that no unreviewed safety question results from this inspection program change.

1999 ANNUAL REPORT

NSE 99-3-043 LWD, REV. 0

LIQUID RADWASTE PROCESSING SYSTEM SKID OPERATION

Description and Purpose

The purpose of this NSE was to evaluate the operation of the Liquid Radwaste Processing System skid in the Fuel Storage Building (FSB) and its impact on the Waste Disposal System and FSAR Chapter 14, "Accident Analysis."

Summary of Safety Evaluation

This evaluation concluded that the operation of the skid meets the commitments of Chapter 14, Accident Analysis, and concludes that use of the skid, in the FSB, can be continued and that the operation is bound by the existing license. There are no unreviewed safety questions.

1999 ANNUAL REPORT

NSE 99-3-046 VC, REV. 0

FSAR TABLE 5.2-3 UPDATE COLUMN
"TEMP" TO "PENETRATION DESIGN"

Description and Purpose

The purpose of this NSE was to evaluate updating FSAR Table 5.2-3 by renaming a Column heading from "Temp" to "Penetr. Design" for those Containment penetrations with expansion bellows or an expansion coil.

Summary of Safety Evaluation

This NSE changes FSAR Table 5.2-3 Column title from "Temp", which is unclear as to what temperature it is referencing to. The new column heading is titled: "Penetr. Design" which corresponds to whether or not the penetration contains expansion bellows or an expansion coil. There is no physical change to hardware, no testing, and no change of flow schematics in the diagram. There are no unreviewed safety questions.

1999 ANNUAL REPORT

NSE 99-3-048 MULT, REV. 0

REVISION OF VALVE POSITIONS IN FSAR TABLE 5.2-3

Description and Purpose

The purpose of this safety evaluation was to revise FSAR Table 5.2-3 to reflect the correct "normal" and "shutdown" positions of specified valves. Consistent with the overall revision, this NSE is based on consideration of the "normal" operating condition as being when the reactor coolant system (RCS) temperature is greater than or equal to 200 degrees F. Said definitions are consistent with the existing Technical Specification definition of "Cold Shutdown".

Summary of Safety Evaluation

FSAR Table 5.2-3 was revised to reflect the "normal" and "shutdown" positions of specified containment isolation valves. For the majority of the affected valves, the revised normal position of "closed" effectively represents pre-positioning of the valves to their safety (closed) position. Changes to the "shutdown" position of specified valves are of no safety consequence but are being implemented under this NSE to be consistent with the existing level of detail of the SAR Table. There are no unreviewed safety questions.

1999 ANNUAL REPORT

NSE 99-3-049 RCS, REV. 0

CORRECT ERROR IN FSAR SECTION 4.5.2

Description and Purpose

The purpose of this NSE was to revise FSAR Section 4.5.2 to correct an error in the way the Reactor Pressure Vessel (RPV) Surveillance Program is described.

Summary of Safety Evaluation

FSAR Section 4.5.2 was changed to add one additional tensile specimen to each of the five RPV Surveillance Capsules, making a total of two for Plate B2802-1 (Longitudinal). This activity corrects an error in the FSAR. There is no change being made to either the facility or the RPV Surveillance Program (as described in WCAP-8475, " Indian Point Unit 3 Reactor Vessel Radiation Surveillance Program", Westinghouse Class 3, January 1975). There are no unreviewed safety questions related to this activity.

1999 ANNUAL REPORT

NSE 99-3-050 CCW, Rev. 0

EVALUATION OF APPARENT NON-CONFORMANCES
RELATED TO CCW PIPING ROUTED INSIDE CRANE WALL
(PROTECTION AGAINST DYNAMIC HELB FORCES)

Description and Purpose

The purpose of this NSE was to document the bases for acceptability of the routing of Component Cooling Water (CCW) supply and return piping to/from the 32 Safety Injection (SI) Recirculation Pump Motor Cooler and 32 Residual Heat Removal (RHR) Heat Exchanger inside the crane (shield) wall.

Summary of Safety Evaluation

The routing of the CCW piping inside the crane wall inside the Containment Building is acceptable. Continued classification of the affected CCW piping inside the missile shield as "Closed, Missile Protected" Loop is justified, based on: 1) Elimination of the main Reactor Coolant System (RCS) loop piping as a "source" of potential damage based on NRC -approved Leak Before Break (LBB) analyses; 2) Elimination of Reactor Coolant System (RCS) - attached piping based on detailed evaluations performed in accordance with Standard Review Plan criteria; 3) Physical separation exists between the affected CCW piping and the pressurizer surge line and the main steam/feedwater piping by concrete walls. This meets the intent of the design basis criteria as stated in the reference which led the CCW piping to be located inside the Crane Wall. There are no unreviewed safety questions.

1999 ANNUAL REPORT

NSE 99-3-052, REV. 0

TEMPORARY POWER FEEDS TO LIGHTING PANEL LP-320
AND PBX TELEPHONE DISTRIBUTION PANEL

Description and Purpose

The purpose of this NSE was to evaluate the effect of the implementation of two Temporary Modifications (TMs) (TM 99-02846-01 "Provide Temp Power to LP-320 & TM 99-02847-01 " Provide Temp Power to PBX Telephone System") on the safe operation of the plant and demonstrate that there exists no Unreviewed Safety Question for those installations.

Summary of Safety Evaluation

Lighting Panel LP-320 and the PBX Telephone System Distribution panel are both normally fed from 480V AC Safety Related MCC 36C. The two temporary modifications provided power from MCC 36E during the planned outage on the 480 Volt Bus 2A. There are no unreviewed safety questions.

1999 ANNUAL REPORT

NSE 99-3-059 RCS, REV. 0

RPV SURVEILLANCE PROGRAM PLATE MATERIAL RETENTION

Description and Purpose

The purpose of this NSE was to change the FSAR to adjust the requirement for retaining Reactor Pressure Vessel (RPV) plate material that could be used in future RPV Surveillance Program analyses.

Summary of Safety Evaluation

A change was made in FSAR Section 4.5.2 which was related to the RPV Surveillance Program to change the requirements for retaining RPV plate metal for future testing. The original FSAR required material from six plates be retained.

The RPV Surveillance Program only used material from four plates. Material from the two non-limiting lower course plates were never used in the RPV Surveillance Program. Thus, in accordance with ASTM E-185-70, material from these two non-limiting plates need not be retained. This change allows the unneeded plate material to be discarded.

This activity corrects an error in the FSAR, does not change the facility nor the RPV Surveillance Program, is in accordance with ASTM E-185, and does not create an unreviewed safety question.

1999 ANNUAL REPORT

NSE 99-3-062 SFPC, REV. 0

RELAXATION OF CORE TIME REQUIREMENTS

Description and Purpose

The purpose of this NSE was to justify the relaxation of the 267-hour time delay imposed by the FSAR prior to removing more than 76 fuel assemblies from the reactor core to the Spent Fuel Pit (SFP).

Summary of Safety Evaluation

The 267-hour limit is exclusively concerned with protecting the SFP thermal design basis of 3.5 x 10^6 BTU/hr and a maximum SFP bulk temperature of 200° F during and subsequent to full-core off load. Relaxation of the 267-hour time limit affects only the heat load in the SFP, and the time limit may only be relaxed in such a manner that supports the established SFP design basis. Therefore, relaxing the 267-hour time limit for removing more than 76 fuel assemblies will not increase the probability of occurrence of an accident evaluated in the safety analysis report. There are no unreviewed safety questions.

1999 ANNUAL REPORT

NSE 99-3-067 MULT, REV. 0

CLARIFICATION OF LOCAL LEAK RATE TEST REQUIREMENTS FOR SPECIFIED CONTAINMENT ISOLATION VALVES

Description and Purpose

The purpose of the NSE was to determine whether not meeting Local Leak Rate Test (LLRT) requirements for specified Containment Isolation Valves (CIVs) did not result in an unreviewed safety question, and thus these valves could be removed from the LLRT Program.

Summary of Safety Evaluation

This NSE clarified the scope of the Appendix J test Program. Certain CIVs have been removed from the LLRT Program. This reduction in scope of the Appendix J testing does not increase the probability of occurrence of an accident evaluated previously in the SAR, and does not adversely affect the plants compliance with 10 CFR 50, Appendix J. There are no unreviewed safety questions.

1999 ANNUAL REPORT

NSE 99-3-071 EDG, REV. 0

CLARIFICATION OF EDG FUEL OIL STORAGE TANK REQUIRED VOLUMES

Description and Purpose

The purpose of this NSE was to clarify the FSAR and Technical Specifications Bases with regards to the minimum fuel oil inventory in the Emergency Diesel Generator (EDG) fuel oil storage tanks required to fulfill design basis requirements for post-LOCA EDG operation.

Summary of Safety Evaluation

This NSE clarified the minimum required inventory of the EDG Fuel Storage Tanks in consideration of updated EDG fuel oil consumption, corrected values for the unusable volume of each of the three oil storage tanks, consideration of the minimum inventory available in the EDG Day Tanks, and re-coating of the interior of 32 Fuel Oil Storage Tank. There are no unreviewed safety questions.

1999 ANNUAL REPORT

NSE 99-3-074 VC, REV. 0

INSTALLATION OF A TEMPORARY FIBER OPTIC PENETRATION FLANGE

Description and Purpose

The purpose of this NSE was to support the use of a Temporary Fiber Optic Penetration Flange Plate (TFP) at Vapor Containment (VC) penetration XX and/or YY and its ability to maintain single flange Containment Isolation capability.

Summary of Safety Evaluation

The TFP at VC penetration XX and /or YY provided temporary video, network, communications and data transmission between the VC and areas outside the VC when the plant was in Refueling Operations and/or Cold Shut Down conditions. The TFP is able to maintain single flange Containment Isolation capability as stipulated in Technical Specifications (TS) Section 3.8. Therefore, the use of the TFP does not constitute an unreviewed safety question.

1999 ANNUAL REPORT

NSE 99-3-080 AIR, REV. 0

TEMPORARY AIR COMPRESSOR SUPPLYING
INSTRUMENT AND STATION AIR

Description and Purpose

This NSE evaluated the safety implications of installing and operating one or more temporary, oil-free air compressor(s) to supplement the Station Air (SA) system in accordance with Temporary Modification (TM) (TM-99-03515-00). It evaluated the "Temporary Operating Procedure" (TOP), which was needed to operate the compressor. This NSE allowed the use of various piping/hose arrangements between the temporary compressor and the plant connection, and it allowed operation of normal back-up air sources for the Instrumentation Air system in the event the temporary compressor was not available.

Summary of Safety Evaluation

A temporary air compressor was installed as an alternate source of compressed air to the Instrument and Station Air systems. All equipment added by this modification was installed in the yard area, and was not capable of direct interaction with safety-related systems, structures or components. There was nothing new being accomplished by this TM that would have degraded the ability of the plant to remain safely shut down, or to operate safely above cold shut down, and no new conditions were created that would affect functions in the plant. Therefore, there are no unreviewed safety questions.

1999 ANNUAL REPORT

NSE 99-3-082 FRW, REV. 1

INSTALLATION OF TEMPORARY FIRE WATER SUPPLY CONNECTION TO CITY WATER HEADER

Description and Purpose

This NSE evaluated enabling water from the Fire Protection System (FPS) to supply those loads normally fed by the isolated city water line.

Summary of Safety Evaluation

This Temporary Modification (TM) provided a connection from Fire Hose Station FP-396 to the City Water to Containment Gate Valve MW-17-1. The TM installation did not affect or interface with any components or systems which were taken credit for coping with and/or mitigating consequences of an accident.

The installation of this TM on the Fire Protection Program had been evaluated and was determined not to degrade the capability to perform fire protection activities. There are no unreviewed safety questions.

1999 ANNUAL REPORT

NSE 99-3-083 SI, REV. 0

RELAXATION OF RECIRCULATION PUMP MAXIMUM FLOW RESTRICTIONS

Description and Purpose

The purpose of this NSE was to allow relaxation of the 3000 gpm flow limitation in step 20 of Emergency Operating Procedure (EOP) ES-1.3,"Transfer of Cold Leg Recirculation," when recirculation containment spray is in service.

Summary of Safety Evaluation

This NSE demonstrated that the 3000 gpm limit for single recirculation pump flow in EOP ES-1.3 may be exceeded whenever recirculation containment spray is in service, provided that the operators throttle core cooling flow while recirculation containment spray is in service, to limit pump cavitation yet meet cooling/spray procedural requirements. This can be done without damage to the pump or deleterious effects on other plant systems. There are no unreviewed safety questions.

1999 ANNUAL REPORT

NSE 99-3-087 ADMIN, REV. 0

IP3 INDUSTRIAL SAFETY ORGANIZATIONAL CHANGES

Description and Purpose

This NSE describes the changes to Indian Point 3's (IP3) organizational structures, as described in the IP3 FSAR (Sections 12.1 and 17.2). These changes involved the reassignment of position responsibilities and reporting relationships related to the Industrial Safety organization.

Summary of Safety Evaluation

The organizational changes reassign position responsibilities and reporting relationships. These changes have reassigned responsibilities, but do not eliminate any functional requirements. They will not reduce the effectiveness of the management of activities or of the oversight of plant operations. There are no unreviewed safety questions.

1999 ANNUAL REPORT

NSE 99-3-089 DC, REV. 0

TEMPORARY CONNECTION OF
36 BATTERY TO PCE BATTERY LOADS

Description and Purpose

The purpose of this NSE was to enable repairs to the Power Conversion Equipment (PCE) battery, using a temporary connection to the Load Commutated Inverter (LCI) which was installed from the Station Battery Number 36 via Temporary Modification (TM) 99-03716-01.

Summary of Safety Evaluation

A temporary power supply to the Circulating Water Pump (CWP) controls system was installed as an alternate source to the existing LCI power supply. Installation of TM 99-3716-01, did not degrade the operation of the Station but instead provided additional redundancy to the plant.

All equipment added by this TM was installed in the Turbine Building, and was not capable of direct interaction with safety-related systems, structures, or components. This TM did not degrade the ability of the plant to remain safely shutdown, or to operate safely above cold shutdown, and no new conditions were created that could have affected safety functions in the plant. There are no unreviewed safety questions.

1999 ANNUAL REPORT

NSE 99-3-090 RHR, REV. 0

INSTALLATION OF BYPASS JUMPER FOR CCR CATEGORY ALARM FROM AC-MOV-1870

Description and Purpose

This NSE evaluated the safety implications of installing Temporary Modification (TM 99-03737-01) to bypass the input to the Central Control Room (CCR) Category Alarm audible alarm from AC-MOV-1870. The TM was installed to bypass the CCR Category Alarm input from AC-1870 only, without preventing the Safeguards Valves in ARP-4 Off Normal Position from being alarmed.

Summary of Safety Evaluation

This NSE concludes that no unreviewed safety question results from the installation of the TM to bypass the input to the CCR Category Alarm audible alarm from AC-MOV-1870 indicating it is in the "Off Normal Position". The TM does not change the required accident alignment of AC-MOV-1870 and failure of the TM will not change the valve position. AC-MOV-1870's position will be verified daily to provide assurance that this valve remains in its designated position.

1999 ANNUAL REPORT

NSE 99-3-091 SWS, REV. 1

TEMPORARY MODIFICATION TO REMOVE EXCITER COOLER ISOLATION VALVE INTERNALS

Description and Purpose

The purpose of this NSE was to evaluate the safety implications of removing the valve internals from the individual Service Water Supply and Return Valves to the Main Generator Exciter Cooler.

Revision 1 of this NSE evaluated the removal of the internals of the Service Water Return Valves from the Main Generator Exciter Cooler and incorporated minor editorial changes.

Summary of Safety Evaluation

This NSE determined that the removal of the valve internals by Temporary Modification (TM) TM-99-03779-00 allows unobstructed cooling water flow to the main generator exciter coolers without the capability of individual flow control per cooler section. The net effect of the TM is the loss of individual valve throttling control of cooling water flows to the Exciter Coolers and will not affect any other heat loads.

Service Water is still available to safety-related heat loads in adequate quantities, and there is no impact on equipment served by the safety-related portion of the Service Water System. Therefore, removing the plugs/gates from the valves in the individual Service Water Supply Lines to the Exciter Coolers was acceptable and did not create an unreviewed safety question.

1999 ANNUAL REPORT

NSE 99-3-093 VCHVP, REV. 0

CHANGES TO THE CONTAINMENT PURGE SYSTEM AS DESCRIBED ON DRAWINGS AND IN THE FSAR

Description and Purpose

The purpose of this NSE was to review changes to the IP3 FSAR with respect to the stated design containment purge rate of 40,000 cfm and the tested containment purge system rate of approximately 28,000 cfm.

Summary of Safety Evaluation

This evaluation determined the change from 40,000cfm to 28,000cfm to be acceptable based on UE&C Letter A PD No.19841. The changes to plant drawings and the FSAR involve providing a description of the as-built containment purge flow conditions. These changes do not alter the design, operation or function of structures, systems and components in the plant. These changes do not require any modification to the configuration of the plant and do not require any change in the methodology and processes that operate the plant. There are no unreviewed safety questions.

1999 ANNUAL REPORT

NSE 99-3-098 STR/FSB, REV. 0

INCORPORATION OF SFP STRUCTURAL/THERMAL ANALYSIS INTO THE FSAR

Description and Purpose

The purpose of this NSE was to correct an error in FSAR Sections 16.4 and 9.3 to reflect the current Spent Fuel Pit (SFP) concrete and thermal stress analyses.

Summary of Safety Evaluation

FSAR Section 16.4.5 was not updated to reflect the new thermal stress analysis of the concrete SFP structure when Amendment 90 was issued to the IP3 Technical Specifications. This NSE revises the FSAR to incorporate the results of that thermal stress analysis. There are no unreviewed safety questions.

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TEMPORARY SAMPLE CONNECTION ON
SI-1821 OUTLET FLANGE

Description and Purpose

This NSE evaluated the implementation of the Temporary Modification (TM), TM 99-03936-01 which was to permit efficient sampling as required by NSE 98-3-138 RCS, "Core Reload for Cycle 11".

Summary of Safety Evaluation

The replacement of the downstream blind flange on SIS vent valve SI-1821 with a mating flange, connecting tubing and a terminating cap/plug for the purpose of permitting administratively controlled sampling of the Boron Injection Tank (BIT) header was evaluated and found acceptable. TM 99-03936-01 reduces the dose rates and manpower consistent with ALARA practices. These changes do not reduce the margin of safety as defined by any Technical Specification and they do not constitute an unreviewed safety question.